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WASTE ANALYSIS PLAN AND WASTE
CHARACTERIZATION SURVEY
BARKSDALE AFB LA

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OCCUPATIONAL AND ENVIRONMENTAL
HEALTH DIRECTORATE
Brooks Air Force Base, TX 78235-5000

LABORATORY

March 1991

Final Technical Report for Period 29 October 1990 - 8 November 1990

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<p>At the request of HQ SAC/DEV, the AFOEHL conducted a waste analysis plan and waste characterization survey at Barksdale AFB (BAFB) on 29 Oct - 1 Nov and 5-8 Nov 90. The scope of this survey was to address hazardous waste management practices, explore opportunities for waste minimization, and to determine wastestreams. The survey team performed a shop-by-shop determination of hazardous wastestreams and met with hazardous waste managers to discuss their waste programs. A waste analysis plan for Barksdale AFB was developed in conjunction with a baseline analysis of identified hazardous wastestreams.</p>			
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I. INTRODUCTION

On 30 Sep 90, HQ SAC/DEV, contacted the Air Force Occupational and Environmental Laboratory (AFOEHL) to discuss a pending contract for \$238,000 to be awarded by Barksdale (BAFB) for the performance of a baseline Waste Analysis Plan (WAP). The WAP is required to complete a part B permit application for the Louisiana Department of Environmental Quality (LDEQ) as a Hazardous Waste Storage Facility. In preliminary discussions, the AFOEHL indicated that \$238,000 was an extremely high bid possibly due to a decision by LDEQ to sample a number of non-hazardous waste streams. On 2 Oct 90 HQ SAC/DEV requested we perform a site visit to assist base personnel in preparing a Waste Analysis Plan (WAP).

In response to a request by the LDEQ to have all waste streams analyzed by 1 Dec 90, HQ SAC/DEV verbally requested we expand the scope of our effort to include sampling of all hazardous waste streams on BAFB.

II. SURVEY DATES AND PERSONNEL

A. Presurvey 29 Oct 90 thru 1 Nov 90

Capt McMullen	AFOEHL/EQH
Capt C. Yen	AFOEHL/EQH

B. Sampling Survey 5-8 Nov 90

?Lt McLaurin	AFOEHL/EQW
Sgt Davis	AFOEHL/EQW
A1C Feagin	AFOEHL/EHB

III. OBJECTIVES

A. Presurvey

1. Review applicable Resource Conservation and Recovery Act (RCRA) hazardous waste requirements with appropriate base personnel.
2. Review LDEQ requirements for a WAP suited for BAFB.
3. Review base records for all waste streams to develop a current list of potential hazardous waste streams.
4. Visit each shop identified as a potential hazardous waste stream generator to collect information for follow-on sampling for lab analysis.

Note: This report was accomplished by the Air Force Occupational and Environmental Health Laboratory (AFOEHL), which is now the Armstrong Laboratory, Occupational and Environmental Health Directorate.

B. Waste Stream Sampling

1. Collect a representative sample for each waste stream identified and verified as a result of the presurvey investigation.

IV. BACKGROUND

A. Barksdale Air Force Base

Barksdale Air Force Base is located in Bossier City, Louisiana. The base is the home of 2nd Bomber Maintenance Wing (BMW) and host to the 8th Air Force Headquarters, 917th Tactical Fighter Group (TFG) - an Air National Guard outfit, and many other tenants.

B. Points of Contacts

Capt Reiter	Chief, Bioenvironmental Engineering Services
SSgt Barber	NCOIC, Bioenvironmental Engineering Services
Donna Kelly	2 CSG/DEV Environmental Coordinator
Neil Washburn	2 CSG/DEV Environmental Engineer
SSgt Davis	2 CSG/DEMW Supervisor, Waste Water Shop

C. Part B Permit Application and Waste Analysis Plan

BAFB is currently storing hazardous waste under authority granted with a Part A or "Interim Status" permit. The base is required by the Louisiana Department of Environmental Quality (LDEQ) to submit the appropriate drawings and technical information to obtain a Part B or "Permanent Status" permit.

One of the technical requirements for a Part B permit is the WAP. This survey was accomplished to meet this requirement.

V. WASTE ANALYSIS PLAN - BARKSDALE AFB

A. Overview of Waste Analysis Plan

Under 40 CFR 265.13, there are basically three general requirements for waste analysis for facilities that either treat, store and/or dispose hazardous wastes:

- facilities must have a current waste analysis before treating, storing, or disposing of any waste

- facilities must have and follow a written WAP

- facilities that accept waste from off-site must inspect and, if necessary, sample and analyze each waste stream from off-site generators

The first requirement is intended to ensure availability of information for treatment, storage and/or disposal in accordance with 40 CFR 265 or 264. The second requirement is intended to provide specifications of parameters to be tested and the rationale for each: the analytical and sampling methods to be

used, the frequency of reanalysis or of a review to assess if analysis is needed, any analyses that are to be provided by generators, and methods to be used to meet specific waste analysis requirements. The third requirement enumerates the information to be added to the WAP to ensure compliance in accepting off-site wastes.

Sections 40 CFR 264 and 265 regulate permitted facilities and interim status facilities, respectively, Barksdale AFB is required to develop, implement and document a working and current WAP in order to operate as a permitted Part B storage facility.

B. Waste Analysis Plan

Table 1 contains the Waste Analysis Plan which specifies current hazardous waste stream on Barksdale AFB. It also includes, in compliance with 40 CFR 264.13, physical description, waste stream code, sampling method, sampling frequency, parameters of analysis, SW 846 test methods, Department of Transportation (DOT) shipping name and hazard class, disposal method or base, and EPA hazardous waste numbers. Rationales for sampling method, sampling frequency and selection of parameters are attached in Appendix B.

C. Summary of Baseline Analysis

A summary of baseline analytical data from 5-8 November 90 sampling survey is presented in Table 2, Baseline Analysis. The raw laboratory analytical data are in Appendix D, Toxicity Characteristic Leaching Procedure (TCLP), analysis of metals include arsenic, barium, chromium, cadmium, lead, selenium, silver, and mercury; they are expressed in milligram(s) of metal per liter (mg/L) of leachate. TCLP volatile organic chemicals (VOC) include benzene, carbon tetrachloride, chlorobenzene, chloroform, 1,2-dichloroethane, 1,1-dichloroethylene, methyl ethyl ketone, tetrachloroethylene, trichloroethylene, and vinyl chloride; they are expressed in milligram(s) of VOC per kilogram (mg/kg) of leachate.

D. Summary of Analysis for Energy Recovery

The characterization data for energy recovery of five oil phase fluid from oil/water separators is presented in Table 3, Analysis for Energy Recovery. Under 40 CFR 266.40, used oil fuel used for energy recovery that does not exceed maximum allowable levels (MAL) of specification (See end of Table 3 for MAL limits) are deemed specification used oil and are minimally regulated to the analysis and record keeping requirements under 40 CFR 266.43(b) (1) and (6). Used oil that exceed the MAL limits are termed "off-specification used oil fuel." Off-specification used oils are more rigorously regulated under subpart E - Used Oil Burned for Energy Recovery - of 40 CFR 266.

VI. FINDINGS

A. The original WAP as proposed by the contractor identified 107 hazardous waste streams. After review of RCRA and LDEQ regulations, recyclable materials were dropped from the WAP which reduced the waste streams to 25.

Table 1. Waste Characterization Analysis Plan

Waste Stream	Physical Description	Waste Stream Code	Sampling Method	Sampling Frequency	Parameters	SW 846 Test Method	DOT Shipping Name and Hazard Class	Disposal Method	EPA Hazardous Waste #
917 TFG/MAEA Jet Engine Bldg 6825 Citra Kleen HD	Brown Liquid	ES-6825-01	COLT/WASA	Annual	Cadmium Chromium Lead	Flashpoint 1010 7090, 7091 7195, 9196 7420, 7421	Flammable Liquid n.o.s.	DRMO	D001 D006 D007 D008
2FMS/MAFC Corrosion Control Bldg 5755 Waste Paint	Grey Solid	CC-5755-01	Composite	Annual	Cadmium Chromium Lead	7090, 7091 7195, 7196 7420, 7421	Hazardous Waste Solid n.o.s. (Cadmium Chromium and Lead Contaminated Material)	DRMO	D006 D007 D008
2FMS/MAFC Corrosion Control Bldg 5755 Waste Glass Media	Grey Solid	CC-5755-02	Composite	Annual	Cadmium Chromium Lead	7090, 7091 7195, 7196 7420, 7421	Hazardous Waste Solid n.o.s. (Cadmium Chromium and Lead Contaminated Material)	DRMO	D006 D007 D008
2FMS/MAFC Corrosion Control Bldg 5755 Waste Plastic Media	Grey Solid	CC-5755-03	Composite	Annual	Cadmium Chromium Lead	7090, 7091 7195, 7196 7420, 7421	Hazardous Waste Solid n.o.s. (Cadmium Chromium and Lead Contaminated Material)	DRMO	D006 D007 D008
2FMS/MAFC Corrosion Control Bldg 5755 Rinse Water	Grey Water	CC-5755-04	Composite	Annual	Cadmium Chromium Lead	7090, 7091 7195, 7196 7420, 7421	Water w/ Waste Paint. (Cadmium Chromium and Lead Contaminated Material)	DRMO	D006 D007 D008

Table 1. Waste Characterization Analysis Plan

Waste Stream	Physical Description	Waste Stream Code	Sampling Method	Sampling Frequency	Parameters	SW 846 Test Method	DOT Shipping Name and Hazard Class	Disposal Method	EPA Hazardous Waste #
2FMS/MAFP Jet Engine Bldg 5778 Carbon Remover	Black Oily Liquid	ES-5778-01	COLIWASA	Annual	Cresylic Acid Methylene CL ₂ Chromium Lead	1010 8040, 8250 7195, 7196 7420, 7421	Waste Combustible Liquid n.o.s.	DRMO	D001 D001 F004 F002 D007 D008
2FMS/MAFP Jet Engine Bldg 5778 Finger Print Remover	Black Oily Liquid	ES-5778-02	COLIWASA	Annual	Flashpoint Naphtha Pheno1 CL ₂ Benzene Chromium Lead	1010 8040, 8250 8010, 8120, 7195, 7196 7420, 7421	Waste Combustible Liquid n.o.s.	DRMO	D001 D001 F002 D007 D008
2FMS/MAFP Jet Engine Bldg 5778 P0-980	Dark Oily Liquid	ES-5778-03	COLIWASA	Annual	Flashpoint Naphtha Pheno1 CL ₂ Benzene Chromium Lead	1010 8040, 8250 8010, 8120, 7195, 7196 7420, 7421	Waste Combustible Liquid n.o.s.	DRMO	D001 D001 F002 D007 D008
2FM/MAFCN NDI Bldg 5755 Emulsifier	Orange Liquid	ND-5755-01	COLIWASA	Annual	Flashpoint PD 680 Trichloroethane	1010 8010, 8240	Waste Flammable Liquid n.o.s.	DRMO	D001 D001 F001
2FMS/MAFCN NDI Bldg 5755 Penetrant	Greenish Liquid	ND-5755-02	COLIWASA	Annual	Flashpoint PD 680 Trichloroethane	1010 8010, 8240	Waste Flammable Liquid n.o.s.	DRMO	D001 D001 F001
2FMS/MAFCN NDI Bldg 5755 Developer	Clear Liquid	ND-5755-03	COLIWASA	Annual	Flashpoint	1010	Waste Flammable Liquid n.o.s.	DRMO	N/A
2FMS/MAFCN NDI Bldg 5755 1,1,1- Trichloro Ethane	Clear Liquid	ND-5755-04	COLIWASA	Annual	Flashpoint PD 680	1010	Waste 1,1,1- Trichloroethane	DRMO	D001 D001

Table 1. Waste Characterization Analysis Plan

Waste Stream	Physical Description	Waste Stream Code	Sampling Method	Sampling Frequency	Parameters	SW 846 Test Method	DOT Shipping Name and Hazard Class	Disposal Method	EPA Hazardous Waste #
ZFTS/MAFC Battery Shop Bldg 5743 Neutralized Nicad Soln	Clear Liquid	BS-5743-01	Dipper	Annual	Nickel Cadmium	1110 7520, 7091	Hazardous Waste Liquid Contaminated with Nickel	DRMO	D006
2CSG/SSRV Auto Hobby Bldg 4143 Waste Paint	Greyish Liquid	A4-4143-01	COLIWASA	Annual	Flashpoint MEK Toluene Xylene Methylene CL ₂ Chromium Lead Mineral Spirits	1010 8015, 8020, 8020, 8240 7095, 7420, 7421	Waste Paint Related Material Mixture Flammable Liquid	DRMO	D001 F005 F005 F003 F001 D007 D008 D001
2CSG/DEM Paint Shop Bldg 4432 Waste Paint	Greyish Liquid	PS-4432-01	COLIWASA	Annual	Flashpoint MEK Toluene Xylene Methylene CL ₂ Chromium Lead	1010 8015, 8020, 8020, 8240 7190, 7420, 7421	Waste Paint Related Material Mixture Flammable Liquid	DRMO	D001 F005 F005 F003 F001 D007 D008
2FMS/MAFC Corrosion Control Bldg 6626 Waste Paint	Greyish Liquid	CC-6626-01	COLIWASA	Annual	Flashpoint MEK Toluene Xylene Methylene CL ₂ Mineral Spirits Chromium Lead	1010 8015, 8020, 8020, 8240 7195, 7420, 7421	Waste Paint Related material Mixture Flammable Liquid	DRMO	D001 F005 F005 F003 F002 F001 D007 D008
2FM/MAFC Corrosion Control Bldg 6626 Chemical Paint Stripper	Greyish Liquid	CC-6626-02	COLIWASA	Annual	Flashpoint Cresylic Acid Methylene CL ₂ CL2 Benzene Mineral Spirits Cadmium Chromium Lead	1010 8040, 8250 8010, 8120, 8250 7090, 7195, 7420, 7421	Waste paint w/ strippers Heavy Metals, and Acids	DRMO	D001 F004 F002 F002 D001 D006 D007 D007

Table 1. Waste Characterization Analysis Plan

Waste Stream	Physical Description	Waste Stream Code	Sampling Method	Sampling Frequency	Parameters	SW 846 Test Method	DOT Shipping Name and Hazard Class	Disposal Method	EPA Hazardous Waste #
ZFNS7MAFC Corrosion Control Bldg 6626 Rinse Water	Greyish Water	CC-6626-03	COLIWASA	Annual	Cadmium Chromium Lead	7090, 7091 7195, 7196 7420, 7421	Water w/ Waste Paint Heavy Metals	DRMO	D006 D007 D008
917 TFG/MEA Corrosion Control Bldg 6824 Waste Paint	Greyish Liquid	CC-6824-01	COLIWASA	Annual	Flashpoint MEK Toluene Xylene Methylene Chloride Chromium Lead	1010 8015, 8240 8020, 8024 8020, 8240 7195, 7196 7420, 7421	Waste Paint Related Material Mixture Flammable Liquid	DRMO	F001 F005 F005 F003 F001 D007 D008

Table 2. Baseline Analysis

Waste Stream	Date Sampled	Base Sample Number	Comments	FP	RX (mg/Kg)	Corr	Major Comp (%)	Comp 10	**TCLP Metals (mg/L)	*TCLP Volatiles (mg/Kg)	
										Not Performed	Not Performed
2FMS/MAFP Jet Engine Bldg 5778 Carbon Remover	11-07-90 GT901344	None		<82.4°F I	Cyanide = <0.2 Sulfide = <10 Not Reactive	Not Performed	Oil Phase C17 - C32 = 93% C9 - C11 = 6% 4-methyl-1-2-pentanol = 1%	Hg = 0.015 Also see note at the end of table Sample Exploded			
2FMS/MAFP Jet Engine Bldg 5778 Finger Print Remover	11-07-90 GT901345	pH = 10.3	<82.4°F I				Water Phase H ₂ O = 13% C16 - C32 = 75% C9 - C11 = 7% 4-methyl-1-2-pentanol = 4% Alpha amino iso-butanoic acid = 1%				
2FMS/MAFP Jet Engine Bldg 5778 PD-680	11-07-90 GT901346	None	<82.4°F I			Not Performed	Detailed in Appendix D-6	NR	Not Performed	NR	
2FMS/MAFCN NDI Bldg 5755 Emulsifier	11-08-90 GT901351	pH = 8.1	>140°F NI		Cyanide = <0.2 Sulfide = <10 Not Reactive	SINC	Water = 14% Ethylene Glycol = 60% Heavy Alcohol = 26%		Ar = 2.5 Ba = <0.5 Cr = 0.29 Cd = <0.05	Hg = <0.0005	A11 = ND
2FMS/MAFCN NDI Bldg 5755 Penetrant	11-08-90 GT901352	None	<82.4°F I				Phthalates = 59% C2 - C5 decalins = 23% 2-Ethylhexyl diphenyl phosphate = 18%				7 = 30 A11 Others = ND
2FMS/MAFCN NDI Bldg 5755 Developer	11-08-90 GT901353	pH = 8.0	>140°F NI		Cyanide = <0.2 Sulfide = <10 Not Reactive	SINC	Detailed in Appendix D-7		Ar = <3. Ba = <0.5 Cr = 54 Cd = <0.05 Pb = <3. Se = <3. Ag = <0.05 Hg = <0.005		A11 = ND

Table 2. Baseline Analysis

Waste Stream	Base Sample Date Sampled & Number	Comments	FP	RX (mg/Kg)	Corr SINC	Major Comp (%) 10	**TCLP Metals (mg/L)	*TCLP Volatiles (mg/Kg)
2FMS/MAFC Corrosion Control Bldg 5755 Waste Paint	11-07-90 GT901347	None	NR	NR	NR	NR	Cd = 9.9 Cr = 22.0 All others = ND or Below RL	NR
2FMS/MAFC Corrosion Control Bldg 5755 Waste Glass Media	11-07-90 GD901349	None	NR	NR	NR	NR	Cd = 72 All others = ND or Below RL	NR
2FMS/MAFC Corrosion Control Bldg 5755 Waste Plastic Media	11-07-90 GD901350	None	NR	NR	NR	NR	All = ND or Below RL	NR
2FMS/MAFC Corrosion Control Bldg 5755 Rinse Water	11-07-90 GT901348	pH = 7.9	<140°F I	Cyanide = <0.2 Sulfide = <10 Not Reactive	SINC	100% Water	All = ND or Below RL	NR

Table 2. Baseline Analysis

Waste Stream	Date Sampled	Sample Number	Comments	FP	RX (mg/kg)	Corr	Hg Comp (%)	**TCLP Volatiles (ppm)	
								Ar = <0.3 Ba = <0.5 Cr = 7.4 Cd = <0.05 Ag = 0.0007 Hg = 0.0007	Not Performed
2FRS/MAFC Corrosion Control Bldg 6626 Waste Paint	11-07-90 GT901341		pH = 7	<82.4°F I	Cyanide = <0.2 Sulfide = 10 Not Reactive	SINC	Detailed in Appendix D-1	Ar = <0.3 Ba = <0.5 Cr = <0.05 Cd = <0.05 Ag = 0.0007 Hg = 0.0007	7 = 6100 All Others = ND
2FMS/MAFC Corrosion Control Chemical Bldg 6626 Paint Stripper	11-07-90 GT901342		pH = 10.4	<82.4°F I	Cyanide = <0.2 Sulfide = <10 Not Reactive	SINC	Detailed in Appendix E page 45	Ar = <0.3 Ba = <0.5 Cr = <0.05 Cd = <0.05 Pb = <0.3 Se = <0.3 Ag = <0.05 Hg = 0.0021	11 = 6.4 All Others = ND
2FMS/MAFC Corrosion Control Bldg 6626 Rinse Water	11-08-90 GT901343		pH = 9.4	>140°F NI	Cyanide = <0.2 Sulfide = <10 Not Reactive	SINC	Water = 96% phenol = 4%	Ar = 0.7 Ba = 4.2 Cr = 340 Cd = 8.1 Pb = 54 Se = <0.3 Ag = 0.07 Hg = 0.0021	
917 TFG/MAEA Corrosion Control Bldg 6824 Waste Paint	11-07-90 GT901340	None		<82.4°F I	Cyanide = <0.2 Sulfide = 10 Not Reactive	NR	Detailed in Appendix D-2	Ar = <0.3 Ba = <0.5 Cr = 45 Cd = 6.2 Pb = <0.3 Se = <0.3 Ag = <0.05 Hg = 0.0050	A11 = ND
917 TFG/MAEA Jet Engine Bldg 6827 Citra Kleen HD	11-07-90 GT901338	None		>140°F NI	Cyanide = <0.2 Sulfide = <10	NR	Detailed in Appendix D-3	Ar = <0.3 Ba = <0.5 Cr = <0.05 Cd = <0.05	Not Performed

Table 2. Baseline Analysis

Waste Stream	Date Sampled	Sample Number	Comments	FP =	<82.4°F	RX (mg/Kg)	Corr SINC	Maj Comp (%)	**TCLP Metals		*TCLP Volatiles (mg/Kg)
									10	Not Performed	
2FRS/RAFCN NDI Bldg 5755 1,1,1-Trichloroethane	11-08-90 GT901354		pH = 8.2	1				Water = 4%	Ethyleneglycol = 88%	Dioxane = 2%	6 = 4800 7 = 30 A1 Others = ND
								Bottom (9%)	1,1,1-Trichloroethane = 51%	C12-C17 Hydrocarbons = 43%	
								Dioxane = 6%			
2FMS/MAFC Battery Shop Bldg 5743 Neutralized Nicad Sol'n	11-07-90 GT901357 GT901358		TOX = <1.0 mg/L NI	>140°F		Cyanide = <0.2 Sulfide = 10 Not Reactive	pH = 9.2	Top = A11 Water Bottom = White Solids	Ar = <0.3 Ba = <0.5 Cr = 0.99 Cd = 9.2 Pb = <0.3	Se = <0.3 Ag = <0.05 Hg = <0.0005 Others = ND	A11
2CSG/SSRV Auto Hobby Bldg 4143 Waste Paint	11-08-90 GT901359		pH = 6.3	>140°F NI		Cyanide = <0.2 Sulfide = <10 Not Reactive	SINC	Detailed in Appendix D-8	Ar = 0.3 Ba = 2.6 Cr = 6.5 Cd = 16	Pb = 66 Se = <0.3 Ag = 0.35 Hg = <0.0005 Others = ND	11 = 350 13 = 72 A11 Others = ND
2CSG/DEM Paint Shop Bldg 4432 Waste Paint	11-08-90 GT901361		pH = 7.3	<82.4°F 1		Cyanide = <0.2 Sulfide = <10 Not Reactive	SINC	Detailed in Appendix D-9	A11 = ND or below RL	7 = 730 A11 Others = ND	

*Following numerical notations denote TCLP VOC analyte:

<u>Numerical</u>	<u>VOC Analyte</u>	<u>Limits of Detection (mg/Kg)</u>
1	Benzene	8.0
2	Carbon Tetrachloride	7.5
3	Chlorobenzene	6.5
4	Chloroform	9.0
5	1,2-Dichloroethane	12
6	1,1-Dichloroethylene	6.0
7	Methyl Ethyl Ketone	19
8	Tetrachloroethylene	7.5
9	Trichloroethylene	6.5
10	Vinyl Chloride	8.5
11	o - Cresol	200.0
12	m - Cresol	200.00
13	p - Cresol	200.00
14	1,4 - Dichlorobenzene	7.5
15	2,4 - Dinitrotoluene	0.13
16	Hexachlorobenzene	0.13
17	Hexachloro-1,3-butadiene	0.5
18	Hexachloroethane	3.0
19	Nitrobenzene	2.0
20	Pentachlorophenol	100.00
21	Pyridine	5.0
22	2,4,5-Trichlorophenol	400.00
23	2,4,6-Trichlorophenol	2.0

ND: None Detected (Below Detection Limits)

NR: Not Required

SINC: Sample Is Not Corrosive

I: Ignitable

NI: Not Ignitable

RL: Regulatory Limit

TCLP VOC's analyzed by GC/MS according to EPA Method 8240

**Following denotes TCLP metal analytes:

Ar	Arsenic
Ba	Barium
Cr	Chromium
Cd	Cadmium
Pb	Lead
Se	Selenium
Ag	Silver
Hg	Mercury

NOTE: TCLP metal samples exploded during digestion, they were not started again due to insufficient volumn for analysis.

Table 3. Analysis for Energy Recovery

	Date Sampled	Base Sample Number	Comments	Metals (ppm or mg/l)	Flashpoint	Total Halogens (%)
AGE & Fuels B.6438 OWS (Oil Phase)	11-08-90	GT901364	Spec	Ar = <0.3 Cd = 0.006 Cr = <0.01 Pb = <0.01	>140°F	<0.1

Spec. Signifies Specification Used Oil Fuel Under 40 CFR 260.40

Ar Signifies Arsenic

Cd Signifies Cadmium

Cr Signifies Chromium

Pb Signifies Lead

°F Signifies Degrees Fahrenheit

NOTE: Oil that exceeds the levels in the table below is deemed off-specification oil in accordance with 40 CFR 260.40.

Off Specification Oil Parameters:

Arsenic 5 ppm

Cadmium 2 ppm

Chromium 10 ppm

Lead 100 ppm

Flashpoint 100 degrees F minimum

Total Halogens 4,000 ppm or 0.4%

B. The LDEQ was contacted to resolve several administrative deficiencies they noted on a previous WAP submission. An amended WAF has been prepared by the AFOEHL for BAFB and incorporates changes to correct LDEQ specified deficiencies.

References

1. United States Environmental Protection Agency "Identification and Listing of Hazardous Waste," 40 CFR 261.
2. Samplers and Sampling Procedures for Hazardous Waste Streams, EPA-600/2-80-018, January 1980.

APPENDIX A
Letter of Request



**DEPARTMENT OF THE AIR FORCE
HEADQUARTERS STRATEGIC AIR COMMAND
OFFUTT AIR FORCE BASE, NEBRASKA 68113-5001**



2 OCT 1990

REPLY TO: DEV
 ATTN OF:
 SUBJECT: Emergency Request for a Hazardous Waste Assistance Survey
 TO: USAFOEHL/CC

1. Request your assistance in conducting a Hazardous Waste Assistance Survey at Barksdale AFB. The survey is required to respond to deficiencies identified by the Louisiana Department of Environmental Quality (LDEQ) in the Barksdale Hazardous Waste Permit Application. Specific attention should be addressed to LDEQ Comment Numbers 66 and 67 on pages 10 and 11 (Atch 1).

2. Written corrections of deficiencies must be submitted to the state by 24 Oct 90. We have requested a 120-day extension (Atch 2) but have not received approval. Therefore, we would appreciate an immediate response to this request so we can accomplish the survey in the established time frame.

2. This is a HQ SAC/DEV/SGBP coordinated letter. Point of contact is Ms Johnnie Shockley, HQ SAC/DEVC, DSN 271-5303/4061.

HUGH M. STARTS, GM-15
 Director, Environmental Management
 DCS/Engineering and Services

- 2 Atch
 1. LDEQ Ltr, 18 Sep 90,
 w/Atchs
 2. HQ SAC/DEV Ltr, 28 Sep 90

APPENDIX B
Waste Analysis Plan Rationale

APPENDIX B

1. SAMPLING METHOD RATIONALE: Composite Liquid Waste Sampler (COLIWASA)

The COLIWASA is probably the single most important hazardous waste sampler in use today. Based upon laboratory and field tests performed by environmental researchers and recommendations by the Environmental Protection Agency (EPA), the COLIWASA was adopted as the liquid waste sampler of choice. According to the EPA publication EPA-600/2-80-018 Jan 1980, "Samplers and Sampling Procedures for Hazardous Waste Streams," the COLIWASA permits the representative sampling of multiphase wastes of a wide range of viscosity, corrosivity, volatility, and solids content. It has a very simple design which allows ease of usage and rapid collection of samples, thereby minimizing the exposure of the sample collector to potential hazards from the wastes to be collected.

Two types of COLIWASA samplers are common: plastic and glass. The plastic type consists of translucent plastic (usually polyvinyl chloride) sampling tube. The glass COLIWASA is usually constructed of borosilicate glass plumbing pipe as the sampling tube and Teflon plastic stopper rod. Disposable glass COLIWASA samplers were used in this survey.

2. PARAMETER SELECTION RATIONALE:

The parameters chosen in the Waste Analysis Plan were based on the current generators knowledge for each process and chemical constituent information provided on material safety data sheets.

3. ANALYSIS METHOD SELECTION RATIONALE:

The SW-846 analytical test methods designated on the waste analysis plan were chosen based upon the parameters selected in order to provide continual and comprehensive characterization of the chemical and physical properties of each waste stream.

APPENDIX C
Waste Oil as a Recyclable Material

APPENDIX C

WASTE OIL AS A RECYCLABLE MATERIAL

By definition in 40 CFR 261.1 (c), material is recycled if it is used, reused or reclaimed. Examples are recovery of lead from spent batteries and the regeneration of spent solvents. A material is used or reused if it is either:

- (i) Employed as an ingredient (including used as an intermediate) in an industrial process to make a produce (for example, distillation bottoms from one process used as feedstock in another process). However, material will not satisfy this condition if distinct components of the material are recovered as separate end products (as when metals are recovered from metal-containing secondary materials); or
- (ii) Employed in a particular function or application as an effective substitute for commercial product (for example, spent pickle liquor used as phosphorus precipitant and sludge conditioner in wastewater treatment). A material is reclaimed if it is processed to recover a usable product or if it is regenerated.

40 CFR 261.6 provides detailed guidance for all recycling issues. Section 261.6(a)(2)(ii) specifically exempts all hazardous waste burned for energy recovery in an industrial boiler or furnace. This includes waste oils, fluids and fuels such as the waste oils, fluids and fuel recycled at Barksdale AFB. These materials are still minimally regulated under section 266.43 which primarily addresses record keeping for waste oil used for energy recovery.

The Louisiana Department of Environmental Quality (LDEQ) addresses recycling in LAC 33:V.41. However only waste oils which exhibit one or more hazardous characteristics or contain a listed hazardous waste are regulated under Chapter 41. The waste oil and fluid at Barksdale AFB were analyzed and found to be nonhazardous.

APPENDIX D
Analytical Data - Major Components

AIR FORCE
OCCUPATIONAL AND ENVIRONMENTAL HEALTH LABORATORY
BROOKS AFB, TEXAS, 78235-5501

REPORT OF ANALYSIS

BASE SAMPLE NO: GT901341 DEHL SAMPLE NO: 90068808

SAMPLE TYPE: WASTE, HAZARDOUS/TOXIC/DISPOSAL

SITE IDENTIFIER: FAWA000A DATE RECEIVED: 901109

DATE COLLECTED: 901107 DATE REPORTED: 910201

SAMPLE SUBMITTED BY: 2nd Strategic Hosp./SGPB

RESULTS

<u>Test</u>	<u>Results</u>	<u>Units</u>	<u>EPA Method</u>
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Comments:

SAMPLE IS (TOP 77%) 23% TOLUENE AND BUTYL ACETATE, 21% METHYL ETHYL KETONE, 16% UNIDENTIFIED ACETATES, 8% XYLENES, 6% PHTHALATES AND 5% UNIDENTIFIED HYDROCARBON, 4% C7-C11 HYDROCARBONS (ALKANES AND CYCLOALKANES), 3% ISOPROPANOL, 3% METHYLENE CHLORIDE, 3% ETHYL ACETATE, 2% 2-HEPTANE, 2% CELLOSOLVE ACETATE, 2% METHYL ISOBUTYL KETONE, 1% ISOBUTANOL AND 1% BUTANOL. (MIDDLE 10%) 100% PINK SOLIDS. (MIDDLE 3%) 80% WATER, 11% METHYL ETHYL KETONE, 7% C1-C4 ALCOHOLS, 1% UNIDENTIFIED ACETATES AND 1% TOLUENE. (BOTTOM 5%) 100% PINKISH AND SILVER COLORED SOLIDS, LOOKS LIKE PAINT WASTE.

GST ROBERT P. DAVIS/BARKSDALE AFB

< - Signifies none detected and the detection limits.

Analyzed by: Datachem

Reviewed by: _____

Michael J. Wantland, TSgt, USAF
NCOIC Occupational Chemistry Branch

AIR FORCE
OCCUPATIONAL AND ENVIRONMENTAL HEALTH LABORATORY
BROOKS AFB, TEXAS, 78235-5501

REPORT OF ANALYSIS

BASE SAMPLE NO: GT901340 OEHL SAMPLE NO: 90068807

SAMPLE TYPE: WASTE, HAZARDOUS/TOXIC/DISPOSAL

SITE IDENTIFIER: FACC174A DATE RECEIVED: 901109

DATE COLLECTED: 901107 DATE REPORTED: 910201

SAMPLE SUBMITTED BY: 2nd Strategic Hosp./SGPB

RESULTS

<u>Test</u>	<u>Results</u>	<u>Units</u>	<u>EPA Method</u>
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Comments:

SAMPLE IS (TOP 20%) 23% TOLUENE, 20% METHYL ETHYL KETONE, 15% ETHYL BETA-ETHOXYPROPIONATE, 6% ISO-PROPANOL, 6% N-BUTYL ACETATE, 6% XYLENES, 4% METHYL ISOBUTYL KETONE, 3% N-BUTANOL, 3% METHYL CYCLOHEXANE, 3% CELLOSOLVE ACETATE, 2% WATER, 2% HEPTANE, 2% ETHYL BENZENE, 2% 2-HEPTANONE, 2% UNKNOWN ACETATE COMPOUND AND 1% ETHYL ACETATE. (MIDDLE 67%) 79% WATER, 8% METHYL ETHYL KETONE, 6% ISO-PROPANOL, 2% N-BUTANOL, 2% N-BUTYL ACETATE, 2% ETHYL BETA-ETHOXYPROPIONATE AND 1% CELLOSOLVE ACETATE. (BOTTOM 13%) 100% SOLID.

< - Signifies none detected and the detection limits.

Analyzed by: Datachem

Reviewed by: _____

Michael J. Wantland, TSgt, USAF
NCOIC Occupational Chemistry Branch

AIR FORCE
OCCUPATIONAL AND ENVIRONMENTAL HEALTH LABORATORY
BROOKS AFB, TEXAS, 78235-5501

REPORT OF ANALYSIS

BASE SAMPLE NO: GT901338

OEHL SAMPLE NO: 90068806

SAMPLE TYPE: WASTE, HAZARDOUS/TOXIC/DISPOSAL

SITE IDENTIFIER: FAPR181A

DATE RECEIVED: 901109

DATE COLLECTED: 901107

DATE REPORTED: 910201

SAMPLE SUBMITTED BY: 2nd Strategic Hosp./SGPB

917 TFG/MAEA *jet engine* Citakleen HD

<u>Test</u>	<u>Results</u>	<u>Units</u>	<u>EPA Method</u>
Arsenic	<0.3	mg/L	3020/7060
Barium	<0.5	mg/L	3010/7080
Cadmium	<0.05	mg/L	3010/7130
Chromium	<0.05	mg/L	3010/7190
Lead	<0.3	mg/L	3010/7420
Mercury	<0.0002	mg/L	7470
Selenium	<0.3	mg/L	3020/7740
Silver	<0.05	mg/L	3010/7760
Flash Point (closed cup)	>140	degrees F	1010
Corrosivity	NP		1110
Hydrogen ion (pH)	NP		1110
Cyanide (total)	<0.2		SW 846 SEC 8.3
Sulfides	<10.0	mg/L	SW 846 SEC 8.3
Major components	SN		

NP : Test Not Performed

SN : See comment.

Comments:

SAMPLE IS 48% WATER, 27% TERPENES, 13% 1-BUTOXY-PROPANOL, 6% ETHANOLAMINE AND 6% OLEIC ACID AND LINOLEIC ACID.

SGT ROBERT P. DAVIS/BARKSDALE AFB

< - Signifies none detected and the detection limits.

TO:

AFOEHL/EQ
BROOKS AFB TX 78235-5501

PAGE 1(Cont'd)

AIR FORCE
OCCUPATIONAL AND ENVIRONMENTAL HEALTH LABORATORY
BROOKS AFB, TEXAS, 78235-5501

REPORT OF ANALYSIS

BASE SAMPLE NO: GT901347 OEHL SAMPLE NO: 90068814

SAMPLE TYPE: WASTE, HAZARDOUS/TOXIC/DISPOSAL

SITE IDENTIFIER: XXXX000A DATE RECEIVED: 901109

DATE COLLECTED: 901107 DATE REPORTED: 910201

SAMPLE SUBMITTED BY: 2nd Strategic Hosp./SGPB

RESULTS

<u>Test</u>	<u>Results</u>	<u>Units</u>	<u>EPA Method</u>
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Comments:

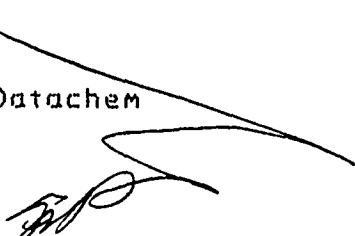
SAMPLE IS (TOP 95%) 31% UNIDENTIFIED ACETATES, 26% METHYL ETHYL KETONE, 13% TOLUENE, 9% BUTYL ACETATE, 8% XYLENES, 5% ETHYL ACETATE, 3% OCTANE, 2% ISOPROPANOL, 2% METHYL ISOBUTYL KETONE AND 1% ACETOXY BUTENE. (BOTTOM 5%) 100% DARK BLUE AND GREY SILVER PARTICLES, MAY BE PAINT CHIPS.

SGT ROBERT P.

DAVIS/BARKSDALE AFB

< - Signifies none detected and the detection limits.

Analyzed by: Datachem

Reviewed by: 

Michael J. Wantland, TSgt, USAF
NCOIC Occupational Chemistry Branch

AIR FORCE
OCCUPATIONAL AND ENVIRONMENTAL HEALTH LABORATORY
BROOKS AFB, TEXAS, 78235-5501

REPORT OF ANALYSIS

BASE SAMPLE NO: GT901344

OEHL SAMPLE NO: 90068811

SAMPLE TYPE: WASTE, HAZARDOUS/TOXIC/DISPOSAL

SITE IDENTIFIER:

DATE RECEIVED: 901109

DATE COLLECTED: 901107

DATE REPORTED: 910201

SAMPLE SUBMITTED BY: 2nd Strategic Hosp./SGPB

RESULTS

<u>Test</u>	<u>Results</u>	<u>Units</u>	<u>EPA Method</u>
Arsenic	NP	mg/L	3020/7060
Barium	NP	mg/L	3010/7080
Cadmium	NP	mg/L	3010/7130
Chromium	NP	mg/L	3010/7190
Lead	NP	mg/L	3010/7420
Mercury	NP	mg/L	7470
Selenium	NP	mg/L	3020/7740
Silver	NP	mg/L	3010/7760
Corrosivity	NP		1110
Hydrogen ion (pH)	NP		1110
Cyanide (total)	NP		SW 846 SEC 8.3
Sulfides	NP	mg/L	SW 846 SEC 8.3
Flash Point (closed cup)	<82.4	degrees F	1010
Major components	SN		

NP : Test Not Performed

SN : See comment.

Comments:

SAMPLE IS 56% DICHLOROBENZENE, 29% CRESOL, 4% C4-C5 BENZENES, 3% WATER, 3% PHENOL, 3% CHLOROBENZENE, 1% NAPHTHALENE AND 1% HYDROCARBON (>C20 ALKANE). SGT ROBERT P. DAVIS/BARKSDALE AFB

TO:

AFOEHL/EQ
BROOKS AFB TX 78235-5501

PAGE 1 (Cont'd)

AIR FORCE
OCCUPATIONAL AND ENVIRONMENTAL HEALTH LABORATORY
BROOKS AFB, TEXAS, 78235-5501

REPORT OF ANALYSIS

BASE SAMPLE NO: GT901346

OEHL SAMPLE NO: 90068813

SAMPLE TYPE: WASTE, HAZARDOUS/TOXIC/DISPOSAL

SITE IDENTIFIER: DATE RECEIVED: 901109

DATE COLLECTED: 901107 DATE REPORTED: 910201

SAMPLE SUBMITTED BY: 2nd Strategic Hosp./SGPB

RESULTS

<u>Test</u>	<u>Results</u>	<u>Units</u>	<u>EPA Method</u>
Arsenic	NP	Mg/L	3020/7060
Barium	NP	Mg/L	3010/7080
Cadmium	NP	Mg/L	3010/7130
Chromium	NP	Mg/L	3010/7190
Lead	NP	Mg/L	3010/7420
Mercury	NP	Mg/L	7470
Selenium	NP	Mg/L	3020/7740
Silver	NP	Mg/L	3010/7760
Corrosivity	NP		1110
Hydrogen ion (pH)	NP		1110
Cyanide (total)	NP		SW 846 SEC 8.3
Sulfides	NP	Mg/L	SW 846 SEC 8.3
Flash Point (closed cup)	<82.4	degrees F	1010
Major components	SN		

NP : Test Not Performed

SN : See comment.

Comments:

SAMPLE IS 88% C10-C13 HYDROCARBONS (ALKANES, CYCLOALKANES, AND AROMATICS) AND 12% MIXED ESTERS OF NEOPENTYL POLYOLS.
SGT ROBERT P. DAVIS/BARKSDALE AFB

TO:

AFOEHL/EQ
BROOKS AFB TX 78235-5501

D-6

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PAGE 1 (Cont'd)

LABORATORY ANALYSIS REPORT AND RECORD (GENERAL)		DATE
TO:	FROM: Brooks Air Force Base	
SAMPLE IDENTITY Bulk Material	DATE RECEIVED November 27, 1990	
SAMPLE FROM	LAB CONTROL NR	

TEST FOR
Bulk Identification and TCLP Test

AF-5611

<u>Sample Identification</u>		<u>Tgnitability at 60°C</u>	<u>pH</u>	<u>Bulk Components to 1% by CC/MS</u>	<u>Concentration (%)</u>
Base # (OEHL#)	DataChem #				
GT901353 68820	46469	/ >60	/ 8.0	Water Traces of benzoic acid, triphenyl phosphine oxide, and 3,3'-Dichloro diphenyl sulphone were detected	vv. 1.

*Developer Tank
NO. Bldg-5775*

<u>Reactivity</u>	<u>TCLP Pesticides</u>
mg/Kg	mg/L
Cyanide <0.2	Endrin <.00001
Sulfide <10	Lindane <.00001
	Methoxychlor <.0006
	Toxaphene <.001
	Chlordane <.0003
	Heptachlor <.00001
	Heptachlor epoxide <.00001
<u>TCLP Metals Results</u>	
mg/L	
Arsenic <3.	
Barium <0.5	<u>TCLP Herbicides</u>
Chromium 54.	mg/L
Cadmium <0.05	2,4-D <.0001
Lead <3.	2,4,5-TP (Silvex) <.00005
Selenium <3.	
Silver <0.05	
Mercury <0.0005	

Note: Tgnitability, pH, TCLP Extraction, TCLP Metals, Mercury, Reactive Sulfide and Cyanide, TCLP Pesticides and TCLP Herbicides by EPA Methods 1010, 9040, 1311, 6010, 7470, 9010, 9012, ANAN, and 8130 respectively

Requesting Agency (Mailing Address)

2d Street Hospital/SGPB
Barksdale AFB, LA 71110-5300

Date Reported by DataChem: *January 25, 1991*
Date Analyzed by DataChem: *January 02, 1991*

AIR FORCE
OCCUPATIONAL AND ENVIRONMENTAL HEALTH LABORATORY
BROOKS AFB, TEXAS, 78235-5501

REPORT OF ANALYSIS

BASE SAMPLE NO: 6T901359 DEHL SAMPLE NO: 90068823

SAMPLE TYPE: WASTE, HAZARDOUS/TOXIC/DISPOSAL.

SITE IDENTIFIER: DATE RECEIVED: 901109

DATE COLLECTED: 901108 DATE REPORTED: 910204

SAMPLE SUBMITTED BY: 2nd Strategic Hosp./SGPB

RESULTS

<u>Test</u>	<u>Results</u>	<u>Units</u>	<u>EPA Method</u>
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Comments:

PER MSGT. VAUGHN AND CONCURRENCE BY LT. MCLARIN (EQE) CHANGE TCLP METAL TO FULL TCLP.

SAMPLE IS (TOP 78%) 81% WATER, 8% TRIETHANOL AMINE, 3% 2-METHYL 2,4-PENTANEDIOL, 2% 1-NOR-BUTOXY 2-PROPANOL, 1% MYRISTIC ACID, 1% OLEIC ACID AND 1% UNIDENTIFIED OXYGEN CONTAINING COMPOUND. (MIDDLE 13%) 84% WATER, 4% ISOPROPANOL ALCOHOL, 3% ACETONE, 3% METHYL ETHYL KETONE, 3% PROPYLENE GLYCOL MONOMETHYL ETHER ACETATE, 2% C4 ALCOHOLS AND 1% PROPYLENE GLYCOL MONOMETHYL ETHER. (BOTTOM 9%) 100% SLUDGE.
< - Signifies none detected and the detection limits.

Analyzed by: DataChem

Reviewed by: 

Michael J. Wantland, TRgt, USAF
NOOTC Occupational Chemistry Branch

AIR FORCE
OCCUPATIONAL AND ENVIRONMENTAL HEALTH LABORATORY
BROOKS AFB, TEXAS, 78235-5501

REPORT OF ANALYSIS

BASE SAMPLE NO: GT901361

OEHL SAMPLE NO: 90068824

SAMPLE TYPE: WASTE, HAZARDOUS/TOXIC/DISPOSAL

SITE IDENTIFIER:

DATE RECEIVED: 901109

DATE COLLECTED: 901108

DATE REPORTED: 910201

SAMPLE SUBMITTED BY: 2nd Strategic Hosp./SGPB

RESULTS

<u>Test</u>	<u>Results</u>	<u>Units</u>	<u>EPA Method</u>
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Comments:

PER MSGT. VAUGHN AND CONCURRENCE BY LT. MCLARIN (EQE) CHANGE TCLP METAL TO FULL TCLP.

SAMPLE IS (TOP 95%) 86% C8-C14 HYDROCARBONS (ALKANES AND AROMATICS) AND 14% TOLUENE. (MIDDLE 3%) 93% WATER, 2% DIETHYLENE GLYCOL MONOBUTYL ETHER, 1% METHANOL, 1% ACETONE, 1% ISOPROPANOL, 1% BUTANOL AND 1% UNIDENTIFIED OXYGEN CONTAINING COMPOUND. (BOTTOM 2%) 100% SLUDGE.

< - Signifies none detected and the detection limits.

Analyzed by: Datachem

Reviewed by: _____

Michael J. Wantland, TSgt, USAF
NCOIC Occupational Chemistry Branch

APPENDIX E
Data from Analytical Laboratory

AIR FORCE
OCCUPATIONAL AND ENVIRONMENTAL HEALTH LABORATORY
BROOKS AFB, TEXAS, 78235-5501

REPORT OF ANALYSIS

BASE SAMPLE NO: IGT901338

DEHL SAMPLE NO: 20068806

SAMPLE TYPE: WASTE, HAZARDOUS/TOXIC/DISPOSAL

SITE IDENTIFIER: FAPR181A

DATE RECEIVED: 901109

DATE COLLECTED: 901107

DATE REPORTED: 910131

SAMPLE SUBMITTED BY: 2nd Strategic Hosp./SGPS

RESULTS

<u>Test</u>	<u>Results</u>	<u>Units</u>	<u>EPA Method</u>
Arsenic	<0.3	mg/L	3020/7040
Barium	<0.5	mg/L	3010/7090
Cadmium	<0.05	mg/L	3010/7130
Chromium	<0.05	mg/L	3010/7190
Lead	<0.3	mg/L	3010/7420
Mercury	<0.0002	mg/L	7470
Selenium	<0.3	mg/L	3020/7740
Silver	<0.05	mg/L	3010/7540
Flash Point (closed cup)	>140	degrees F	1010
Corrosivity	NP		1110
Hydrogen ion (pH)	NP		1110
Cyanide (total)	<0.2		SW 846 SEC 6.7
Sulfides	<10.0	mg/L	SW 846 SEC 8.7
Major components	SN		

NP : Test Not Performed

SN : See comment.

Comments:

SAMPLE IS 48% WATER, 27% TERPENES, 13% 1-BUTOXY-PROPANOL, 6% ETHANOLAMINE AND 6% OLFTIC ACID AND LINOLEIC ACID.

SGT ROBERT P. DAVIS/BARKSDALE AFB

< - Signifies none detected and the detection limits.

TO:

AFOEHL/EQ
BROOKS AFB TX 78235-5501

AIR FORCE
OCCUPATIONAL AND ENVIRONMENTAL HEALTH LABORATORY
SPARKS AFB, TEXAS, 78235-5501

REPORT OF ANALYSIS

BASE SAMPLE NO: GT901338 DEHL SAMPLE NO: 90062606

SAMPLE TYPE: WASTE, HAZARDOUS/TOXIC/DISPOSAL

SITE IDENTIFIER: FAPR131A DATE RECEIVED: 901109

DATE COLLECTED: 901107 DATE REPORTED: 910131

SAMPLE SUBMITTED BY: 2nd Strategic Hosp./SGPB

RESULTS

<u>Test</u>	<u>Results</u>	<u>Units</u>	<u>EPA Method</u>
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Analyzed by: Datachem

Reviewed by:


Michael J. Wantland, TSgt, USAF
NCOIC Occupational Chemistry Branch

AER REPORT
OCCUPATIONAL AND ENVIRONMENTAL HEALTH LABORATORY
BROOKS AFB, TEXAS, 78235-5501

REPORT OF ANALYSIS

RASH SAMPLE NO: RT901340

DEFHI SAMPLE NO: 90068802

SAMPLE TYPE: WASTE, HAZARDOUS/TOXIC/DISPOSAL

SITE IDENTIFIER: FADC124A

DATE RECEIVED: 901109

DATE COLLECTED: 901107

DATE REPORTED: 910214

SAMPLE SUBMITTED BY: 2nd Strategic Hosp./RAGP

RESULTS

<u>Test</u>	<u>Results</u>	<u>Units</u>	<u>EPA Method</u>
Arsenic	<0.3	mg/L	3020/2060
Barium	<0.5	mg/L	3010/2081
Benzene	<8.0	µg/L	
Cadmium	6.2	mg/L	3010/2130
Carbon Tetrachloride	<7.5	mg/L	
Chlordane	<0.0003	mg/L	
Chlorobenzene	<6.5	mg/L	
Chloroform	<9.0	mg/L	
Chromium	45	mg/L	3010/2190
m-Cresol	<0.005	mg/L	
o-Cresol	<0.005	mg/L	
p-Cresol	<0.005	mg/L	
1,4-Dichlorobenzene	<0.0044	mg/L	
1,2-Dichloroethane	<12	mg/L	
1,1-Dichloroethene	<6.0	mg/L	
2,4-D	<0.0001	mg/L	
2,4-Dinitrotoluene	<.0057	mg/L	
Endrin	<0.00001	mg/L	
Heptachlor	<0.00001	mg/L	
Hexachlorobenzene	<0.0019	mg/L	
Hexachlorobutadiene	<0.0009	mg/L	
Hexachloroethane	<0.0016	mg/L	
Lead	<0.3	mg/L	3010/2420
Lindane	<0.00001	mg/L	
Mercury	0.0050	mg/L	7470
Methoxychlor	<0.0006	mg/L	
Methyl Ethyl Ketone	<19	mg/L	
Nitrobenzene	<0.0019	mg/L	

TO:

AFOFHL/EQ
BROOKS AFB TX 78235-5501

PAGE 1 (Cont'd)

AIR FORCE
OCCUPATIONAL AND ENVIRONMENTAL HEALTH LABORATORY
BROOKS AFB, TEXAS, 78235-5501

REPORT OF ANALYSIS

RASF SAMPLE NO: GT901340

OFHL SAMPLE NO: 90068807

SAMPLE TYPE: WASTE, HAZARDOUS/TOXIC/DISPOSAL

SITE IDENTIFIER: FACC174A

DATE RECEIVED: 901109

DATE COLLECTED: 901107

DATE REPORTED: 910204

SAMPLE SUBMITTED BY: 2nd Strategic Hosp./SGPR

RESULTS

<u>Test</u>	<u>Results</u>	<u>Units</u>	<u>EPA Method</u>
Pentachlorophenol	<.0036	mg/L	
Pyridine	<.0050	mg/L	
Selenium	<0.3	mg/L	3020/7740
Silver	<0.05	mg/L	3010/7740
Toxaphene	<0.001	mg/L	
Vinyl Chloride	<8.5	mg/L	
Trichloroethylene	<6.5	mg/L	
Tetrachloroethylene	<7.5	mg/L	
2,4,5-Trichlorophenol	<.0050	mg/L	
2,4,6-Trichlorophenol	<.0027	mg/L	
Silvex	<0.00015	mg/L	
Flash Point (closed cup)	<82.4	degrees F	1010
Corrosivity	SINC		1110
Hydrogen ion (pH)	6.5		1110
Cyanide (total)	<0.2		SW 846 SEC 8.3
Sulfides	10	mg/L	SW 846 SEC 8.3
Major components	SN		

SINC : Sample is not corrosive.

SN : See comment.

AIR FORCE
OCCUPATIONAL AND ENVIRONMENTAL HEALTH LABORATORY
BROOKS AFB, TEXAS, 78235-5501

REPORT OF ANALYSIS

BASE SAMPLE NO: GT901340 DEHL SAMPLE NO: 90068R07

SAMPLE TYPE: WASTE, HAZARDOUS/TOXIC/DISPOSAL

SITE IDENTIFIER: FACC174A DATE RECEIVED: 901109

DATE COLLECTED: 901107 DATE REPORTED: 910204

SAMPLE SUBMITTED BY: 2nd Strategic Hosp./SGPR

RESULTS

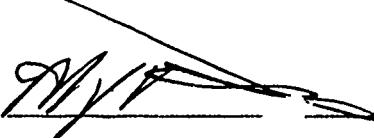
<u>Test</u>	<u>Results</u>	<u>Units</u>	<u>EPA Method</u>
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Comments:

SAMPLE IS (TOP 20%) 23% TOLUENE, 20% METHYL ETHYL KETONE, 15% ETHYL BETA-ETHOXYPROPIONATE, 6% ISO-PROPANOL, 6% N-BUTYL ACETATE, 6% XYLENES, 4% METHYL ISOBUTYL KETONE, 3% N-BUTANOL, 3% METHYL CYCLOHEXANE, 3% CELLOSOLVE ACETATE, 2% WATER, 2% HEPTANE, 2% ETHYL BENZENE, 2% 2-HEPTANONE, 2% UNKNOWN ACETATE COMPOUND AND 1% ETHYL ACETATE. (MIDDLE 67%) 79% WATER, 8% METHYL ETHYL KETONE, 6% ISO-PROPANOL, 2% N-BUTANOL, 2% N-BUTYL ACETATE, 2% ETHYL BETA-ETHOXYPROPIONATE AND 1% CELLOSOLVE ACETATE. (BOTTOM 13%) 100% SOLID.

< - Signifies none detected and the detection limits.

Analyzed by: Datachem

Reviewed by: 

Michael J. Wantland, TSgt, USAF
NCOIC Occupational Chemistry Branch

AIR FORCE
OCCUPATIONAL AND ENVIRONMENTAL HEALTH LABORATORY
BROOKS AFB, TEXAS, 78235-5501

REPORT OF ANALYSIS

BASE SAMPLE NO: GTP01541

OEHL SAMPLE NO: 20068808

SAMPLE TYPE: WASTE, HAZARDOUS/TOXIC/DISPOSAL

SITE IDENTIFIER: FAMAC000A

DATE RECEIVED: 901109

DATE COLLECTED: 901107

DATE REPORTED: 910131

SAMPLE SUBMITTED BY: 3rd Strategic Hosp./SGPS

RESULTS

<u>Test</u>	<u>Results</u>	<u>Units</u>	<u>EPA Method</u>
Arsenic	<0.3	mg/L	3020/2060
Barium	.0.5	mg/L	3010/2080
Cadmium	<0.05	mg/L	3010/2130
Chromium	7.4	mg/L	3010/2190
Lead	<0.3	mg/L	3010/2420
Mercury	0.0007	mg/L	7470
Selenium	<0.3	mg/L	3020/2740
Silver	<0.05	mg/L	3010/2760
Corrosivity	STNC		1110
Hydrogen ion (pH)	7		1110
Cyanide - total	<0.2		SW 846 SEC A.3
Sulfides	10	mg/L	SW 846 SEC B.3
Flash Point (closed cup)	<82.4	degrees F	1010
Major components	SN		

STNC : Sample is not corrosive.

SN : See comment.

TO:

AFOFHL/FO
BROOKS AFB TX 78235-5501 41

PAGE 1 (Cont'd)

AIR FORCE
OCCUPATIONAL AND ENVIRONMENTAL HEALTH LABORATORY
BROOKS AFB, TEXAS, 78235-5501

REPORT OF ANALYSIS

PAGE SAMPLE NO: AT901341

OFHL SAMPLE NO: 90065808

SAMPLE TYPE: WASTE, HAZARDOUS/TOXIC/DISPOSAL

SITE IDENTIFIER: FAWANNA

DATE RECEIVED: 901109

DATE COLLECTED: 901107

DATE REPORTED: 910131

SAMPLE SUBMITTED BY: 2nd Strategic Hosp./SGPB

RESULTS

Test	Results	Units	EPA Method
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Comments:

SAMPLE IS (TOP 77%) 23% TOLUENE AND BUTYL ACETATE, 21% METHYL ETHYL KETONE, 16% UNIDENTIFIED ACETATES, 8% XYLENES, 6% PHTHALATES AND 5% UNIDENTIFIED HYDROCARBON, 4% C7-C11 HYDROCARBONS (ALKENES AND CYCLOALKANES), 3% ISOPROPANOL, 3% METHYLENE CHLORIDE, 3% ETHYL ACETATE, 2% 2-HEPTANE, 2% CELLOSOLVE ACETATE, 2% METHYL ISOBUTYL KETONE, 1% ISOBUTANOL AND 1% BUTANOL. (MIDDLE 10%) 100% PINK SOLIDS. (MIDDLE 3%) 30% WATER, 11% METHYL ETHYL KETONE, 7% C1-C4 ALCOHOLS, 1% UNIDENTIFIED ACETATES AND 1% TOLUENE. (BOTTOM 5%) 100% PINKISH AND SILVER COLORED SOLIDS, LOOKS LIKE PAINT WASTE.

Sgt ROBERT P. DAVIS/RARKSDALE AFB

< - Signifies none detected and the detection limits.

Analyzed by: Datachem

Reviewed by: 

Michael J. Wantland, TSgt, USAF
NOAIC Occupational Chemistry Branch

AIR FORCE
OCCUPATIONAL AND ENVIRONMENTAL HEALTH LABORATORY
BROOKS AFB, TEXAS, 78235-5501

REPORT OF ANALYSIS

BASE SAMPLE NO: ST901342

OEHL SAMPLE NO: 90068809

SAMPLE TYPE: WASTE, HAZARDOUS/TOXIC/DISPOSAL.

SITE IDENTIFIER: FAWA000A

DATE RECEIVED: 901109

DATE COLLECTED: 901107

DATE REPORTED: 910204

SAMPLE SUBMITTED BY: 2nd Strategic Hosp./SGPB

RESULTS

<u>Test</u>	<u>Results</u>	<u>Units</u>	<u>EPA Method</u>
Arsenic	<0.3	mg/L	30120/2060
Barium	<0.5	mg/L	3010/2080
Benzene	<8.0	µg/L	
Cadmium	<0.05	mg/L	3010/2130
Carbon Tetrachloride	<7.5	mg/L	
Chlordane	NP	mg/L	
Chlorobenzene	<6.5	mg/L	
Chloroform	<9.0	mg/L	
Chromium	<0.05	mg/L	3010/2190
m-Cresol	<.0050	mg/L	
o-Cresol	480.	mg/L	
p-Cresol	<.0050	mg/L	
1,4-Dichlorobenzene	<0.0044	mg/L	
1,2-Dichloroethane	<12	mg/L	
1,1-Dichloroethene	<6.0	mg/L	
2,4-D	<0.0001	mg/L	
2,4-Dinitrotoluene	<.0057	mg/L	
Endrin	NP	mg/L	
Heptachlor	NP	mg/L	
Hexachlorobenzene	<0.0019	mg/L	
Hexachlorobutadiene	<0.0009	mg/L	
Hexachloroethane	<0.0016	mg/L	
Lead	<0.3	mg/L	3010/2420
Lindane	NP	mg/L	
Mercury	0.0021	mg/L	7470
Methoxychlor	NP	mg/L	
Methyl Ethyl Ketone	6100	mg/L	
Nitrobenzene	<0.0019	mg/L	

TO:

AFOEHL/ER
BROOKS AFB TX 78235-5501

PAGE 1 (Cont'd)

AIR FORCE
OCCUPATIONAL AND ENVIRONMENTAL HEALTH LABORATORY
BROOKS AFB, TEXAS, 78235-5501

REPORT OF ANALYSTS

BASE SAMPLE NO: GT901342

DEHL SAMPLE NO: 90068809

SAMPLE TYPE: WASTE, HAZARDOUS/TOXIC/DISPENSAL

SITE IDENTIFIER: FAWANNA

DATE RECEIVED: 901109

DATE COLLECTED: 901107

DATE REPORTED: 910204

SAMPLE SUBMITTED BY: 2nd Strategic Hosp./SGPB

RESULTS

<u>Test</u>	<u>Results</u>	<u>Units</u>	<u>EPA Method</u>
Pentachlorophenol	<.0036	mg/L	
Pyridine	<.0050	mg/L	
Selenium	<0.3	mg/L	3020/7740
Silver	<0.05	mg/L	3010/7760
Toxaphene	NP	mg/L	
Vinyl Chloride	<8.5	mg/L	
Trichloroethylene	<6.5	mg/L	
Tetrachloroethylene	<7.5	mg/L	
2,4,5-Trichlorophenol	<.0050	mg/L	
2,4,6-Trichlorophenol	<.0027	mg/L	
Silvex	<0.00005	mg/L	
Flash Point (closed cup)	<82.4	degrees F	1010
Corrosivity	SINC		1110
Hydrogen ion (pH)	10.4		1110
Cyanide (total)	<0.2		SW 846 SEC 8.3
Sulfides	<10.0	mg/L	SW 846 SEC 8.3
Major components	SN		

NP : Test Not Performed

SINC : Sample is not corrosive.

SN : See comment.

AIR FORCE
OCCUPATIONAL AND ENVIRONMENTAL HEALTH LABORATORY
BROOKS AFB, TEXAS, 78235-5511

REPORT OF ANALYSIS

BASE SAMPLE NO: ST901342

DEHL SAMPLE NO: 90068809

SAMPLE TYPE: WASTE, HAZARDOUS/TOXIC/DISPOSAL.

SITE IDENTIFIER: FAWA000A

DATE RECEIVED: 901109

DATE COLLECTED: 901107

DATE REPORTED: 910204

SAMPLE SUBMITTED BY: 2nd Strategic Hosp./SGPB

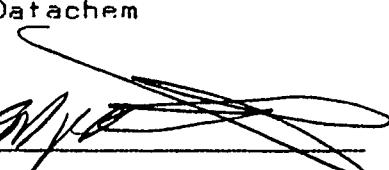
RESULTS

<u>Test</u>	<u>Results</u>	<u>Units</u>	<u>EPA Method</u>
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Comments:

SGT ROBERT P. DAVIS/BARKSDALE AFB
SAMPLE IS (TOP 92%) 55% PHENOL, 20% METHYLENE CHLORIDE, 18% WATER AND
7% UNKNOWN PHENOL COMPOUND. (BOTTOM 8%) 100% SOLID.
< - Signifies none detected and the detection limits.

Analyzed by: Datachem

Reviewed by: 

Michael J. Wantland, TSgt, USAF
NCOIC Occupational Chemistry Branch

AIR FORCE
OCCUPATIONAL AND ENVIRONMENTAL HEALTH LABORATORY
BROOKS AFB, TEXAS, 78235-5501

REPORT OF ANALYSIS

BASE SAMPLE NO: GT901343 OEHL SAMPLE NO: 90068810

SAMPLE TYPE: WASTE, HAZARDOUS/TOXIC/DISPOSAL

SITE IDENTIFIER: FAWA0000A DATE RECEIVED: 901109

DATE COLLECTED: 901108 DATE REPORTED: 910204

SAMPLE SUBMITTED BY: 2nd Strategic Hosp./SGPB

RESULTS

<u>Test</u>	<u>Results</u>	<u>Units</u>	<u>EPA Method</u>
Arsenic	0.7	mg/L	3020/2060
Radium	4.2	mg/L	3010/2080
Benzene	<8.0	ug/L	
Cadmium	8.1	mg/L	3010/2130
Carbon Tetrachloride	<7.5	mg/L	
Chlordane	NP	mg/L	
Chlorobenzene	<6.5	mg/L	
Chloroform	<9.0	mg/L	
Chromium	340	mg/L	3010/2190
m-Cresol	<.0050	mg/L	
o-Cresol	6.4	mg/L	
p-Cresol	<.0050	mg/L	
1,4-Dichlorobenzene	<0.0044	mg/L	
1,2-Dichloroethane	<12	mg/L	
1,1-Dichloroethene	<6.0	mg/L	
2,4-D	<0.0001	mg/L	
2,4-Dinitrotoluene	<.0057	mg/L	
Endrin	NP	mg/L	
Heptachlor	NP	mg/L	
Hexachlorobenzene	<0.0019	mg/L	
Hexachlorobutadiene	<0.0009	mg/L	
Hexachloroethane	<0.0016	mg/L	
Lead	54.	mg/L	3010/2420
Lindane	NP	mg/L	
Mercury	0.0021	mg/L	2470
Methoxychlor	NP	mg/L	
Methyl Ethyl Ketone	<19	mg/L	
Nitrobenzene	<0.0019	mg/L	

TO:

AFOEHL/EQ
BROOKS AFB TX 78235-5501

PAGE 1 (Cont'd)

AIR FORCE
OCCUPATIONAL AND ENVIRONMENTAL HEALTH LABORATORY
BROOKS AFB, TEXAS, 78235-5501

REPORT OF ANALYSIS

BASE SAMPLE NO: GT901343

OFHL SAMPLE NO: 91068810

SAMPLE TYPE: WASTE, HAZARDOUS/TOXIC/DISPOSAL

SITE IDENTIFIER: FAWA000A

DATE RECEIVED: 901109

DATE COLLECTED: 901108

DATE REPORTED: 910204

SAMPLE SUBMITTED BY: 2nd Strategic Hosp./SGPR

RESULTS

<u>Test</u>	<u>Results</u>	<u>Units</u>	<u>EPA Method</u>
Pentachlorophenol	<.0036	mg/L	
Pyridine	<.0050	mg/L	
Selenium	<0.3	mg/L	3020/7740
Silver	0.07	mg/L	3010/7760
Toxaphene	NP	mg/L	
Vinyl Chloride	<8.5	mg/L	
Trichloroethylene	<6.5	mg/L	
Tetrachloroethylene	<7.5	mg/L	
2,4,5-Trichlorophenol	<.0050	mg/L	
2,4,6-Trichlorophenol	<.0027	mg/L	
Silvex	<0.00005	mg/L	
Flash Point (closed cup)	>140	degrees F	1010
Corrosivity	SINC		1110
Hydrogen ion (pH)	9.4		1110
Cyanide (total)	<0.2		SW 846 SEC 8.3
Sulfides	<10.0	mg/L	SW 846 SEC 8.3
Major components	SN		

NP : Test Not Performed

SINC : Sample is not corrosive.

SN : See comment.

AIR FORCE
INDUSTRIAL AND ENVIRONMENTAL HEALTH LABORATORY
BROOKS AFB, TEXAS, 78235-5511

REPORT OF ANALYSIS

BASE SAMPLE NO: GT901343 DEHL SAMPLE NO: 90068810

SAMPLE TYPE: WASTE, HAZARDOUS/TOXIC/DISPERSAL.

SITE IDENTIFIER: FAWANNA DATE RECEIVED: 901109

DATE COLLECTED: 901108 DATE REPORTED: 910204

SAMPLE SUBMITTED BY: 2nd Strategic Hosp./SGPR

RESULTS

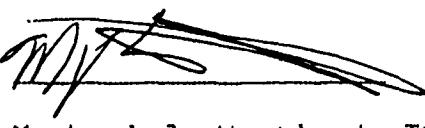
<u>Test</u>	<u>Results</u>	<u>Units</u>	<u>EPA Method</u>
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Comments:

SAMPLE IS 96% WATER AND 4% PHENOL.

< - Signifies none detected and the detection limits.

Analyzed by: Datachem

Reviewed by: 

Michael J. Wantland, TSgt, USAF
NCOIC Occupational Chemistry Branch

AIR FORCE
OCCUPATIONAL AND ENVIRONMENTAL HEALTH LABORATORY
BROOKS AFB, TEXAS, 78235-5501

REPORT OF ANALYSIS

BASE SAMPLE NO: ST901344

NEHL SAMPLE NO: 90062811

SAMPLE TYPE: WASTE, HAZARDOUS/TOXIC/DISPOSAL

SITE IDENTIFIER:

DATE RECEIVED: 901109

DATE COLLECTED: 901107

DATE REPORTED: 910131

SAMPLE SUBMITTED BY: 2nd Strategic Hosp., AFPA

RESULTS

Test	Results	Units	EPA Method
Arsenic	NP	mg/L	3020/2060
Barium	NP	mg/L	3010/2030
Cadmium	NP	mg/L	3010/2130
Chromium	NP	mg/L	3010/2190
Lead	NP	mg/L	3010/2420
Mercury	NP	mg/L	7470
Selenium	NP	mg/L	3020/2740
Silver	NP	mg/L	3010/2760
Corrosivity	NP		1110
Hydrogen ion (pH)	NP		1110
Cyanide (total)	NP		SW 846 SEC 8.3
Sulfides	NP	mg/L	SW 846 SEC 8.7
Flash Point (closed cup)	<82.4	degrees F	1010
Major components	SN		

NP : Test Not Performed

SN : See comment.

Comments:

SAMPLE IS 56% DICHLOROBENZENE, 29% CRFSDI, 4% C4-C5 BENZENES, 3% WATER, 3% PHENOL, 3% CHLOROBENZENE, 1% NAPHTHALEN AND 1% HYDROCARBON (>C20 ALKANE). SGT ROBERT P. DAVIS/BARKSDALE AFB

TO:

AFDEHIL/ED
BROOKS AFB TX 78235-5501

PAGE 1 (Cont'd)

AIR FORCE
OCCUPATIONAL AND ENVIRONMENTAL HEALTH LABORATORY
BROOKS AFB, TEXAS, 78235-5501

REPORT OF ANALYSIS

RASH SAMPLE NO: 9T9011344 DEHL SAMPLE NO: 9006AB11

SAMPLE TYPE: WASTE, HAZARDOUS/TOXIC/DISPOSAL

SITE IDENTIFIER: DATE RECEIVED: 901109

DATE COLLECTED: 901107 DATE REPORTED: 910131

SAMPLE SUBMITTED BY: 2nd Strategic Hosp., SGAFB

RESULTS

<u>Test</u>	<u>Results</u>	<u>Units</u>	<u>EPA Method</u>
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Analyzed by: Dataschem

Reviewed by:

Michael J. Wantland, TSgt, USAF
NCOIC Occupational Chemistry Branch

AIR FORCE
OCCUPATIONAL AND ENVIRONMENTAL HEALTH LABORATORY
BROOKS AFB, TEXAS, 78235-5501

REPORT OF ANALYSIS

BASE SAMPLE NO: GT901345 DEHL SAMPLE NO: 90068812

SAMPLE TYPE: WASTE, HAZARDOUS/TOXIC/DISPOSAL

SITE IDENTIFIER: DATE RECEIVED: 901109

DATE COLLECTED: 901107 DATE REPORTED: 910130

SAMPLE SUBMITTED BY: 2nd Strategic Hosp./SGPB

RESULTS

<u>Test</u>	<u>Results</u>	<u>Units</u>	<u>EPA Method</u>
Corrosivity	SINC		1110
Flash Point (closed cup)	>82.4	degrees F	1010
Mercury	0.015	mg/L	2470
Hydrogen ion (pH)	10.3		1110
Cyanide (total)	<0.2		SW 846 SEC 8.3
Sulfides	<10.0	mg/L	SW 846 SEC 3.3
Arsenic	SN	mg/L	3020/7060
Barium	SN	mg/L	3010/7080
Cadmium	SN	mg/L	3010/7130
Chromium	SN	mg/L	3010/7190
Lead	SN	mg/L	3010/7420
Selenium	SN	mg/L	3020/7740
Silver	SN	mg/L	3010/7760
Major components	SN		

SINC : Sample is not corrosive.

SN : See comment.

TO:

AFODEHL/EO
BROOKS AFB TX 78235-5501 51

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AIR FORCE
OCCUPATIONAL AND ENVIRONMENTAL HEALTH LABORATORY
BROOKS AFB, TEXAS, 78235-5501

REPORT OF ANALYSIS

BASE SAMPLE NO: GT901345

DEHL SAMPLE NO: 90068812

SAMPLE TYPE: WASTE, HAZARDOUS/TOXIC/DISPOSAL

SITE IDENTIFIER:

DATE RECEIVED: 901109

DATE COLLECTED: 901107

DATE REPORTED: 910130

SAMPLE SUBMITTED BY: 2nd Strategic Hospt./SGPB

RESULTS

<u>Test</u>	<u>Results</u>	<u>Units</u>	<u>EPA Method</u>
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Comments:

THE SAMPLES EXPLODED DURING DIGESTION, THEY WERE NOT STARTED AGAIN BECAUSE OF INSUFFICIENT VOLUME.

SAMPLE IS (TOP 49%) 93% C17-C32 HYDROCARBONS (ALKANES AND CYCLOALKANES), 6% C9-C11 HYDROCARBONS (ALKANES AND CYCLOALKANES) AND 1% 4-METHYL-2-PENTANOL. (BOTTOM 51%) 75% C16-C32 HYDROCARBONS, 13% WATER, 7% C9-C11 HYDROCARBONS, 4% 4-METHYL-2-PENTANOL AND 1% ALPHA AMINO ISO-BUTANOTIC ACID.

SGT ROBERT

P. DAVIS/BARKS ALE AFB

< - Signifies none detected and the detection limits.

Analyzed by: Datachem

Reviewed by: 

Michael J. Wantland, TSgt, USAF
NOOTC Occupational Chemistry Branch

AIR FORCE
OCCUPATIONAL AND ENVIRONMENTAL HEALTH LABORATORY
BROOKS AFB, TEXAS, 78235-5501

REPORT OF ANALYSIS

BASE SAMPLE NO: GT901346 DFHL SAMPLE NO: 90048813

SAMPLE TYPE: WASTE, HAZARDOUS, TOXIC/DISPOSAL

SITE IDENTIFIER: DATE RECEIVED: 901109

DATE COLLECTED: 901107 DATE REPORTED: 910131

SAMPLE SUBMITTED BY: 2nd Strategic Hosp., SGFB

RESULTS

<u>Test</u>	<u>Results</u>	<u>Units</u>	<u>EPA Method</u>
Arsenic	NP	mg/L	3020/7060
Barium	NP	mg/L	3011/7030
Cadmium	NP	mg/L	3010/7130
Chromium	NP	mg/L	3011/7150
Lead	NP	mg/L	3010/7400
Mercury	NP	mg/L	7470
Selenium	NP	mg/L	3020/7740
Silver	NP	mg/L	3011/7750
Corrosivity	NP		1110
Hydrogen ion (pH)	NP		1110
Cyanide (total)	NP		SW 846 SEC 8.3
Sulfides	NP	mg/L	SW 846 SEC 8.3
Flash Point (closed cup)	<82.4	degrees F	1010
Major components	SN		

NP : Test Not Performed

SN : See comment.

Comments:

SAMPLE IS 88% C10-C13 HYDROCARBONS (ALKANES, CYCLOALKANES, AND AROMATICS) AND 12% MIXED ESTERS OF NEOPENTYL POLYOLS.
SGT ROBERT P. DAVIS/BARKSDALE AFB

TO:

AFOEHL/EQ
BROOKS AFB TX 78235-5501 53

PAGE 1 (Cont'd)

AIR FORCE
OCCUPATIONAL AND ENVIRONMENTAL HEALTH LABORATORY
BROOKS AFB, TEXAS, 78235-5801

REPORT OF ANALYSIS

BASE SAMPLE NO: GT901346 OEHL SAMPLE NO: 90068813

SAMPLE TYPE: WASTE, HAZARDOUS/TOXIC/DISPOSAL

SITE IDENTIFIER: DATE RECEIVED: 901109

DATE COLLECTED: 901107 DATE REPORTED: 910131

SAMPLE SUBMITTED BY: 2nd Strategic Hosp./SPPB

RESULTS

<u>Test</u>	<u>Results</u>	<u>Units</u>	<u>EPA Method</u>
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Analyzed by: Dataram

Reviewed by:

Michael J. Wantland, TSgt, USAF
NOAIC Occupational Chemistry Branch

AIR FORCE
OCCUPATIONAL AND ENVIRONMENTAL HEALTH LABORATORY
BROOKS AFB, TEXAS, 78235-5501

REPORT OF ANALYSTS

BASE SAMPLE NO: ST901347 DEHL SAMPLE NO: 90068814

SAMPLE TYPE: WASTE, HAZARDOUS/TOXIC/DISPOSAL

SITE IDENTIFIER: XXXX000A DATE RECEIVED: 901109

DATE COLLECTED: 901107 DATE REPORTED: 910131

SAMPLE SUBMITTED BY: 2nd Strategic Hosp./SGFB

RESULTS

<u>Test</u>	<u>Results</u>	<u>Units</u>	<u>EPA Method</u>
Arsenic	<0.3	mg/L	3020/7060
Barium	<0.5	mg/L	3010/7080
Cadmium	<0.05	mg/L	3010/7130
Chromium	10	mg/L	3010/7190
Lead	<0.3	mg/L	3010/7420
Mercury	0.0006	mg/L	7470
Selenium	<0.3	mg/L	3020/7240
Silver	<0.05	mg/L	3010/7260
Corrosivity	SINC		1110
Hydrogen ion (pH)	5.2		1110
Cyanide (total)	NP		SW 846 SEC 8.3
Sulfides	NP	mg/L	SW 846 SEC 8.3
Flash Point (closed cup)	<82.4	degrees F	1010
Major components	SN		

SINC : Sample is not corrosive.

NP : Test Not Performed

SN : See comment.

TO:

AFOEHL/EO
BROOKS AFB TX 78235-5501

AIR FORCE
OCCUPATIONAL AND ENVIRONMENTAL HEALTH LABORATORY
BROOKS AFB, TEXAS, 78235-5601

REPORT OF ANALYSIS

BASE SAMPLE NO: GT901342 DEHL SAMPLE NO: 90068614

SAMPLE TYPE: WASTE, HAZARDOUS/TOXIC/DISPOSAL

SITE IDENTIFIER: XXXX000A DATE RECEIVED: 901109

DATE COLLECTED: 901107 DATE REPORTED: 910131

SAMPLE SUBMITTED BY: 2nd Strategic Hosp./SGPB

RESULTS

<u>Test</u>	<u>Results</u>	<u>Units</u>	<u>EPA Method</u>
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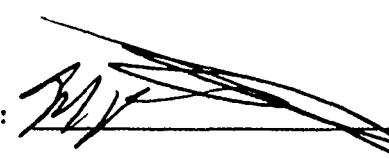
Comments:

SAMPLE IS (TOP 25%) 31% UNIDENTIFIED ACETATES, 26% METHYL ETHYL KETONE, 13% TOLUENE, 9% BUTYL ACETATE, 8% XYLENES, 5% ETHYL ACETATE, 3% OCTANE, 2% ISOPROPANOL, 2% METHYL ISOBUTYL KETONE AND 1% ACETONIC BUTENE. (BOTTOM 5%) 100% DARK BLUE AND GREY SILVER PARTICLES, MAY BE PAINT CHIPS.
SGT ROBERT F.

DAVIS/BARKSDALE AFB

* - Signifies none detected and the detection limits.

Analyzed by: Datachem

Reviewed by: 

Michael J. Mantland, TSGt, USAF
NOOTC Occupational Chemistry Branch

AIR FORCE
OCCUPATIONAL AND ENVIRONMENTAL HEALTH LABORATORY
BROOKS AFB, TEXAS, 78235-5501

REPORT OF ANALYSIS

BASE SAMPLE NO: 6T901348 DEHL SAMPLE NO: 90068815

SAMPLE TYPE: WASTE, HAZARDOUS/TOXIC/DISPOSAL.

SITE IDENTIFIER: XXXXX000A DATE RECEIVED: 901109

DATE COLLECTED: 901107 DATE REPORTED: 910131

SAMPLE SUBMITTED BY: 2nd Strategic Hosp./SGPB

RESULTS

<u>Test</u>	<u>Results</u>	<u>Units</u>	<u>EPA Method</u>
Arsenic	<0.3	mg/L	3020/2060
Barium	<0.5	mg/L	3010/7030
Cadmium	<0.05	mg/L	3010/7130
Chromium	1.2	mg/L	3010/7120
Lead	<0.3	mg/L	3010/7420
Mercury	<0.0002	mg/L	7470
Selenium	<0.3	mg/L	3020/7740
Silver	<0.05	mg/L	3010/7760
Flash Point (closed cup)	<140	degrees F	1010
Corrosivity	SIINC		1110
Hydrogen ion (pH)	7.9		1110
Cyanide (total)	<0.2		SW 846 SEC 8.3
Sulfides	<10.0	mg/L	SW 846 SEC 8.3
Major components	SN		

SIINC : Sample is not corrosive.

SN : See comment.

Comments:

SAMPLE IS 100% WATER.

SGT ROBERT P. DAVIS/BARKSDALE AFB

< - Signifies none detected and the detection limits.

TO:

AFDEHL/EQ
BROOKS AFB TX 78235-5501

AIR FORCE
OCCUPATIONAL AND ENVIRONMENTAL HEALTH LABORATORY
BROOKS AFB, TEXAS, 78235-5501

REPORT OF ANALYSIS

BASE SAMPLE NO: 6T901348 DEHL SAMPLE NO: 90063815

SAMPLE TYPE: WASTE, HAZARDOUS/TOXIC/DISPOSAL

SITE IDENTIFIER: XXXX000A DATE RECEIVED: 901109

DATE COLLECTED: 901107 DATE REPORTED: 910131

SAMPLE SUBMITTED BY: 2nd Strategic Hosp., SARP

RESULTS

<u>Test</u>	<u>Results</u>	<u>Units</u>	<u>EPA Method</u>
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Analyzed by: Datachem

Reviewed by:


Michael J. Wantland, TSGt, USAF
NOOTC Occupational Chemistry Branch

PAGE 2

AIR FORCE
OCCUPATIONAL AND ENVIRONMENTAL HEALTH LABORATORY
BROOKS AFB, TEXAS, 78235-5501

REPORT OF ANALYSIS

RASF SAMPLE NO: AD901349

DEHL SAMPLE NO: 90068816

SAMPLE TYPE: RESIDUE/ASH

SITE IDENTIFIER: XXXX000A

DATE RECEIVED: 901109

DATE COLLECTED: 901107

DATE REPORTED: 910131

SAMPLE SUBMITTED BY: 2nd Strategic Hosp. SGPB

RESULTS

<u>Test</u>	<u>Results</u>	<u>Units</u>	<u>EPA Method</u>
Arsenic	<0.3	mg/L	3020/7060
Barium	0.9	mg/L	3010/7080
Cadmium	9.9	mg/L	3010/7130
Chromium	22.	mg/L	3010/7120
Lead	<0.3	mg/L	3010/7420
Mercury	<0.0002	mg/L	7470
Selenium	<0.3	mg/L	3020/7740
Silver	0.05	mg/L	3010/7760

Comments:

AGT ROBERT P. DAVIS/BARKSDALE AFB

< - Signifies none detected and the detection limits.

Analyzed by: DatACHEM

Reviewed by: 

Michael J. Mantland, TFCgt, USAF
NCOIC Occupational Chemistry Branch

TO:

AFOFHL/RD
BROOKS AFB TX 78235-5501

PAGE 1

AIR FORCE
OCCUPATIONAL AND ENVIRONMENTAL HEALTH LABORATORY
BROOKS AFB, TEXAS, 78235-5501

REPORT OF ANALYSIS

BASE SAMPLE NO: GD901350

DEHL SAMPLE NO: 90069457

SAMPLE TYPE: RESIDUE/ASH

SITE IDENTIFIER: XXXX000A

DATE RECEIVED: 901114

DATE COLLECTED: 901107

DATE REPORTED: 910201

SAMPLE SUBMITTED BY: 2nd Strategic Hosp./SGPB

2 FMS PAINT shop

RESULTS

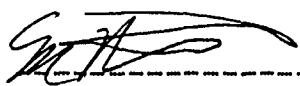
Test	Results	Units	EPA Method
Arsenic	<0.3	mg/L	3020/7060
Barium	1.2	mg/L	3010/7080
Cadmium	72.	mg/L	3010/7130
Chromium	4.2	mg/L	3010/7190
Lead	<0.3	mg/L	3010/7420
Mercury	<0.0002	mg/L	7470
Selenium	<0.3	mg/L	3020/7740
Silver	<0.05	mg/L	3010/7760

Comments:

SGT ROBERT P. DAVIS/BARKSDALE AFB

< - Signifies none detected and the detection limits.

Analyzed by: Datachem

Reviewed by: 

Michael J. Wantland, TSgt, USAF
NCOIC Occupational Chemistry Branch

TO:

AFOEHL/EQ
BROOKS AFB TX 78235-5501

PAGE 1

AIR FORCE
OCCUPATIONAL AND ENVIRONMENTAL HEALTH LABORATORY
BROOKS AFB, TEXAS, 78235-5501

REPORT OF ANALYSIS

BASE SAMPLE NO: GT901351

OEHHL SAMPLE NO: 90068818

SAMPLE TYPE: WASTE, HAZARDOUS/TOXIC/DISPOSAL.

SITF IDENTIFIER: FANDXXXX

DATE RECEIVED: 901109

DATE COLLECTED: 901108

DATE REPORTED: 910204

SAMPLE SUBMITTED BY: 2nd Strategic Hosp./SRPB

RESULTS

<u>Test</u>	<u>Results</u>	<u>Units</u>	<u>EPA Method</u>
Toxaphene	NP	mg/L	
Arsenic	2.5	mg/L	3020/2060
Barium	<0.5	mg/L	3010/2080
Benzene	<8.0	µg/L	
Cadmium	<0.05	mg/L	3010/2130
Carbon Tetrachloride	<7.5	mg/L	
Chlordane	NP	mg/L	
Chlorobenzene	<6.5	mg/L	
Chloroform	<9.0	mg/L	
Chromium	0.29	mg/L	3010/2190
m-Cresol	<.0050	mg/L	
o-Cresol	<.0050	mg/L	
p-Cresol	<.0050	mg/L	
1,4-Dichlorobenzene	<0.0044	mg/L	
1,2-Dichloroethane	<12	mg/L	
1,1-Dichloroethene	<6.0	mg/L	
2,4-D	<0.0001	mg/L	
2,4-Dinitrotoluene	<.0057	mg/L	
Endrin	NP	mg/L	
Heptachlor	NP	mg/L	
Hexachlorobenzene	<0.0019	mg/L	
Hexachlorobutadiene	<0.0009	mg/L	
Hexachloroethane	<0.0016	mg/L	
Lead	<3.0	mg/L	3010/2420
Lindane	NP	mg/L	
Mercury	<0.0005	mg/L	7470
Methoxychlor	NP	mg/L	
Methyl Ethyl Ketone	<19	mg/L	

TO:

AFOFHL/EQ
BROOKS AFB TX 78235-5501

PAGE 1 (Cont'd)

AIR FORCE
OCCUPATIONAL AND ENVIRONMENTAL HEALTH LABORATORY
BROOKS AFB, TEXAS, 78235-5501

REPORT OF ANALYSIS

BASE SAMPLE NO: GT901351

OFHL SAMPLE NO: 91068818

SAMPLE TYPE: WASTE, HAZARDOUS/TOXIC/DISPOSAL

SITE IDENTIFIER: FANDXXXX

DATE RECEIVED: 901109

DATE COLLECTED: 901108

DATE REPORTED: 910204

SAMPLE SUBMITTED BY: 2nd Strategic Hosp./SGPB

RFSU/TS

<u>Test</u>	<u>Results</u>	<u>Units</u>	<u>FPA Method</u>
Nitrobenzene	<0.0019	mg/L	
Pentachlorophenol	<.0036	mg/L	
Pyridine	<.0050	mg/L	
Selenium	<3.0	mg/L	3020/7740
Silver	0.08	mg/L	3010/7760
Vinyl Chloride	<8.5	mg/L	
Trichloroethylene	<6.5	mg/L	
Tetrachloroethylene	<7.5	mg/L	
2,4,5-Trichlorophenol	<.0050	mg/L	
2,4,6-Trichlorophenol	<.0027	mg/L	
Silvex	<0.00005	mg/L	
Flash Point (closed cup)	>140	degrees F	1010
Corrosivity	SINC		1110
Hydrogen ion (pH)	8.1		1110
Cyanide (total)	<0.2		SW 846 SFC 8.3
Sulfides	<10.0	mg/L	SW 846 SFC 8.3
Major components	SN		

NP : Test Not Performed

SN : See comment.

SINC : Sample is not corrosive.

AIR FORCE
OCCUPATIONAL AND ENVIRONMENTAL HEALTH LABORATORY
BROOKS AFB, TEXAS, 78235-5501

REPORT OF ANALYSIS

BASE SAMPLE NO: GT901351

DEHL SAMPLE NO: 90068818

SAMPLE TYPE: WASTE, HAZARDOUS/TOXIC/DISPOSAL

SITE IDENTIFIER: FANDXXXX

DATE RECEIVED: 901109

DATE COLLECTED: 901108

DATE REPORTED: 910204

SAMPLE SUBMITTED BY: 2nd Strategic Hosp./SGPB

RESULTS

<u>Test</u>	<u>Results</u>	<u>Units</u>	<u>FPA Method</u>
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Comments:

PER MSGT. VAUGHN AND CONCURRENCE BY LT. MCLARIN (EQE) CHANGE TCLP METAL TO FULL TCLP.

SAMPLE IS 60% ETHYLENE GLYCOL, 26% HIGH MOLECULAR WEIGHT ALCOHOLS AND 14% WATER.

< - Signifies none detected and the detection limits.

Analyzed by: Datachem

Reviewed by: 

Michael J. Wantland, TSgt, USAF
NCOIC Occupational Chemistry Branch

AIR FORCE
OCCUPATIONAL AND ENVIRONMENTAL HEALTH LABORATORY
BROOKS AFB, TEXAS, 78235-5501

REPORT OF ANALYSIS

BASE SAMPLE NO: GT901352

OFHL SAMPLE NO: 90068819

SAMPLE TYPE: WASTE, HAZARDOUS/TOXIC/DISPOSAL.

SITE IDENTIFIER: FANDXXXX

DATE RECEIVED: 901109

DATE COLLECTED: 901108

DATE REPORTED: 910204

SAMPLE SUBMITTED BY: 2nd Strategic Hosp./SGPB

RESULTS

<u>Test</u>	<u>Results</u>	<u>Units</u>	<u>EPA Method</u>
Silver	NP	mg/L	3010/7760
Arsenic	NP	mg/L	3020/7060
Barium	NP	mg/L	3010/7080
Benzene	<8.0	ug/L	
Cadmium	NP	mg/L	3010/7130
Carbon Tetrachloride	<7.5	mg/L	
Chlordane	NP	mg/L	
Chlorobenzene	<6.5	mg/L	
Chloroform	<9.0	mg/L	
Chromium	NP	mg/L	3010/7190
m-Cresol	<.0050	mg/L	
o-Cresol	<.0050	mg/L	
p-Cresol	<.0050	mg/L	
1,4-Dichlorobenzene	<0.0044	mg/L	
1,2-Dichloroethane	<12	mg/L	
1,1-Dichloroethene	<6.0	mg/L	
2,4-D	NP	mg/L	
2,4-Dinitrotoluene	<.0057	mg/L	
Endrin	NP	mg/L	
Heptachlor	NP	mg/L	
Hexachlorobenzene	<0.0019	mg/L	
Hexachlorobutadiene	<0.0009	mg/L	
Hexachloroethane	<0.0016	mg/L	
Lead	NP	mg/L	3010/7420
Lindane	NP	mg/L	
Mercury	NP	mg/L	7470
Methoxychlor	NP	mg/L	
Methyl Ethyl Ketone	30.	mg/L	

TO:

AFOEHL/ER
BROOKS AFB TX 78235-5501

PAGE 1 (Cont'd)

AIR FORCE
OCCUPATIONAL AND ENVIRONMENTAL HEALTH LABORATORY
BROOKS AFB, TEXAS, 78235-5501

REPORT OF ANALYSIS

BASE SAMPLE NO: GT901352

OFHL SAMPLE NO: 90068819

SAMPLE TYPE: WASTE, HAZARDOUS/TOXIC/DISPOSAL

SITE IDENTIFIER: FANDXXXX

DATE RECEIVED: 901109

DATE COLLECTED: 901108

DATE REPORTED: 910204

SAMPLE SUBMITTED BY: 2nd Strategic Hosp./SIGPB

RESULTS

<u>Test</u>	<u>Results</u>	<u>Units</u>	<u>EPA Method</u>
Nitrobenzene	<0.0019	mg/L	
Pentachlorophenol	<.0036	mg/L	
Pyridine	<.0050	mg/L	
Selenium	NP	mg/L	3020/2240
Toxaphene	NP	mg/L	
Vinyl Chloride	<8.5	mg/L	
Trichloroethylene	<6.5	mg/L	
Tetrachloroethylene	<2.5	mg/L	
2,4,5-Trichlorophenol	<.0050	mg/L	
2,4,6-Trichlorophenol	<.0027	mg/L	
Silvex	NP	mg/L	
Flash Point (closed cup)	<82.4	degrees F	1010
Corrosivity	NP		1110
Hydrogen ion (pH)	NP		1110
Cyanide (total)	NP		SW 846 SFC 8.3
Sulfides	NP	mg/L	SW 846 SFC 8.3
Major components	SN		

NP : Test Not Performed

SN : See comment.

AIR FORCE
OCCUPATIONAL AND ENVIRONMENTAL HEALTH LABORATORY
BROOKS AFB, TEXAS, 78235-5511

REPORT OF ANALYSIS

BASE SAMPLE NO: GT9011352 DEHL SAMPLE #: 90068819

SAMPLE TYPE: WASTE, HAZARDOUS/TOXIC/DISPOSAL

SITE IDENTIFIER: FANDXXXX DATE RECEIVED: 901109

DATE COLLECTED: 901108 DATE REPORTED: 910204

SAMPLE SUBMITTED BY: 2nd Strategic Hosp./SIGPB

RESULTS

<u>Test</u>	<u>Results</u>	<u>Units</u>	<u>EPA Method</u>
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Comments:

PER MSGT. VAUGHN AND CONCURRENCE BY LT. MCLARIN (EIE) CHANGE TCI P METAL TO FULL TCI P.

SAMPLE IS 59% PHTHALATES, 23% C2-C5 DECALINS AND 18% 2-ETHYL HEXYL DIPHENYL PHOSPHATE.

< - Signifies none detected and the detection limits.

Analyzed by: Datachem

Reviewed by: 

Michael J. Wantland, TRgt, USAF
NCOIC Occupational Chemistry Branch

AIR FORCE
OCCUPATIONAL AND ENVIRONMENTAL HEALTH LABORATORY
BROOKS AFB, TEXAS, 78235-5501

REPORT OF ANALYSIS

BASE SAMPLE NO: GT901353

OEHL SAMPLE NO: 90068820

SAMPLE TYPE: WASTE, HAZARDOUS/TOXIC/DISPOSAL

SITE IDENTIFIER: FANDXXXX

DATE RECEIVED: 901109

DATE COLLECTED: 901108

DATE REPORTED: 910204

SAMPLE SUBMITTED BY: 2nd Strategic Hosp./SGPB

RESULTS

<u>Test</u>	<u>Results</u>	<u>Units</u>	<u>EPA Method</u>
1,2-Dichloroethane	<12	mg/L	
Arsenic	<3.0	mg/L	3020/7060
Barium	<0.5	mg/L	3010/7080
Benzene	<8.0	µg/L	
Cadmium	<0.05	mg/L	3010/7130
Carbon Tetrachloride	<7.5	mg/L	
Chlordane	<0.0003	mg/L	
Chlorobenzene	<6.5	mg/L	
Chloroform	<9.0	mg/L	
Chromium	54.	mg/L	3010/7190
m-Cresol	<.0050	mg/L	
o-Cresol	<.0050	mg/L	
p-Cresol	<.0050	mg/L	
1,4-Dichlorobenzene	<0.0044	mg/L	
1,1-Dichloroethene	<6.0	mg/L	
2,4-D	<0.0001	mg/L	
2,4-Dinitrotoluene	<.0057	mg/L	
Endrin	<0.00001	mg/L	
Heptachlor	<0.00001	mg/L	
Hexachlorobenzene	<0.0019	mg/L	
Hexachlorobutadiene	<0.0009	mg/L	
Hexachloroethane	<0.0016	mg/L	
Lead	<3.0	mg/L	3010/7420
Lindane	<0.00001	mg/L	
Mercury	<0.0005	mg/L	7470
Methoxychlor	<0.006	mg/L	
Methyl Ethyl Ketone	<19	mg/L	
Nitrobenzene	<0.0019	mg/L	

TO:

AFOEHL/EQ
BROOKS AFB TX 78235-5501

PAGE 1 (Cont'd)

AIR FORCE
OCCUPATIONAL AND ENVIRONMENTAL HEALTH LABORATORY
BROOKS AFB, TEXAS, 78235-5501

REPORT OF ANALYSIS

BASE SAMPLE NO: GT901353

OFHL SAMPLE NO: 90068820

SAMPLE TYPE: WASTE, HAZARDOUS/TOXIC/DISPOSAL

SITE IDENTIFIER: FANDXXXX

DATE RECEIVED: 901109

DATE COLLECTED: 901108

DATE REPORTED: 910204

SAMPLE SUBMITTED BY: 2nd Strategic Hosp./SRPB

RESULTS

<u>Test</u>	<u>Results</u>	<u>Units</u>	<u>EPA Method</u>
Pentachlorophenol	<.0036	mg/L	
Pyridine	<.0050	mg/L	
Selenium	<3.0	mg/L	3020/7740
Silver	<0.05	mg/L	3010/7760
Toxaphene	<0.001	mg/L	
Vinyl Chloride	<8.5	mg/L	
Trichloroethylene	<6.5	mg/L	
Tetrachloroethylene	<7.5	mg/L	
2,4,5-Trichlorophenol	<.0050	mg/L	
2,4,6-Trichlorophenol	<.0027	mg/L	
Silvex	<0.00005	mg/L	
Flash Point (closed cup)	>140	degrees F	1010
Corrosivity	SINC		1110
Hydrogen ion (pH)	8.0		1110
Cyanide (total)	<0.2		SW 846 SEC 8.3
Sulfides	<10.0	mg/L	SW 846 SEC 8.3
Major components	SN		

SN : See comment.

SINC : Sample is not corrosive.

AIR FORCE
OCCUPATIONAL AND ENVIRONMENTAL HEALTH LABORATORY
BROOKS AFB, TEXAS, 78235-5501

REPORT OF ANALYSIS

BASE SAMPLE NO: GT901353 DEHL SAMPLE NO: 90068820

SAMPLE TYPE: WASTE, HAZARDOUS/TOXIC/DISPOSAL

SITE IDENTIFIER: FANDXXXX DATE RECEIVED: 901109

DATE COLLECTED: 901108 DATE REPORTED: 910204

SAMPLE SUBMITTED BY: 2nd Strategic Hosp./SGPB

RESULTS

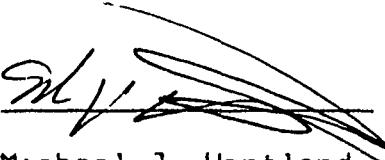
<u>Test</u>	<u>Results</u>	<u>Units</u>	<u>EPA Method</u>
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Comments:

PER MSGT. VAUGHN AND CONCURRENCE BY LT. MCLARIN (ERF) CHANGE TCLP METAL TO FULL TCLP.

SAMPLE IS 99% WATER AND 1% TRACES OF BENZOIC ACID, TRIPHENYL PHOSPHINE OXIDE, AND 3,3'-DICHLORODIPHENYL SULPHONE WERE DETECTED.
< - Signifies none detected and the detection limits.

Analyzed by: Datachem

Reviewed by: 

Michael J. Wantland, Sgt., USAF
NCOTC Occupational Chemistry Branch

AIR FORCE
OCCUPATIONAL AND ENVIRONMENTAL HEALTH LABORATORY
BROOKS AFB, TEXAS, 78235-5501

REPORT OF ANALYSIS

BASE SAMPLE NO: AT901354

OEHL SAMPLE NO: 90068821

SAMPLE TYPE: WASTE, HAZARDOUS/TOXIC/DISPOSAL

SITE IDENTIFIER: FANDXXXX

DATE RECEIVED: 901109

DATE COLLECTED: 901108

DATE REPORTED: 910204

SAMPLE SUBMITTED BY: 2nd Strategic Hosp./SRPB

RESULTS

<u>Test</u>	<u>Results</u>	<u>Units</u>	<u>EPA Method</u>
Heptachlor	NP	mg/L	
Arsenic	NP	mg/L	3020/2060
Barium	NP	mg/L	3010/2080
Benzene	<8.0	ug/L	
Cadmium	NP	mg/L	3010/2130
Carbon Tetrachloride	<2.5	mg/L	
Chlordane	NP	mg/L	
Chlorobenzene	<6.5	mg/L	
Chloroform	<9.0	mg/L	
Chromium	NP	mg/L	3010/2190
m-Cresol	<.0050	mg/L	
o-Cresol	<.0050	mg/L	
p-Cresol	<.0050	mg/L	
1,4-Dichlorobenzene	<0.0044	mg/L	
1,2-Dichloroethane	<12	mg/L	
1,1-Dichloroethene	4800.	mg/L	
2,4-D	NP	mg/L	
2,4-Dinitrotoluene	<.0057	mg/L	
Endrin	NP	mg/L	
Hexachlorobenzene	<0.0019	mg/L	
Hexachlorobutadiene	<0.0009	mg/L	
Hexachloroethane	<0.0016	mg/L	
Lead	NP	mg/L	3010/2420
Lindane	NP	mg/L	
Mercury	NP	mg/L	2420
Methoxychlor	NP	mg/L	
Methyl Ethyl Ketone	<19	mg/L	
Nitrobenzene	<0.0019	mg/L	

TO:

AFOEHL/EQ
BROOKS AFB TX 78235-5501

PAGE 1(Cont'd)

AIR FORCE
OCCUPATIONAL AND ENVIRONMENTAL HEALTH LABORATORY
BROOKS AFB, TEXAS, 78235-5501

REPORT OF ANALYSIS

BASE SAMPLE NO: GT901354

DEHL SAMPLE NO: 91068821

SAMPLE TYPE: WASTE, HAZARDOUS/TOXIC/DISPOSAL

SITE IDENTIFIER: FANDXXXX

DATE RECEIVED: 901109

DATE COLLECTED: 901108

DATE REPORTED: 910204

SAMPLE SUBMITTED BY: 2nd Strategic Hosp./SGPB

RESULTS

<u>Test</u>	<u>Results</u>	<u>Units</u>	<u>EPA Method</u>
Pentachlorophenol	<.0036	mg/L	
Pyridine	<.0050	mg/L	
Selenium	NP	mg/L	3020/2740
Silver	NP	mg/L	3010/2760
Toxaphene	NP	mg/L	
Vinyl Chloride	<8.5	mg/L	
Trichloroethylene	<6.5	mg/L	
Tetrachloroethylene	<7.5	mg/L	
2,4,5-Trichlorophenol	<.0050	mg/L	
2,4,6-Trichlorophenol	<.0027	mg/L	
Silvex	NP	mg/L	
Flash Point (closed cup)	<82.4	degrees F	1010
Corrosivity	SINC		1110
Hydrogen ion (pH)	8.2		1110
Cyanide (total)	NP		SW 846 SFC 8.3
Sulfides	NP	mg/L	SW 846 SFC 8.3
Major components	SN		

SN : See comment.

NP : Test Not Performed

SINC : Sample is not corrosive.

AIR FORCE
OCCUPATIONAL AND ENVIRONMENTAL HEALTH LABORATORY
BROOKS AFB, TEXAS, 78235-5501

REPORT OF ANALYSIS

BASE SAMPLE NO: GT901354

DEHL SAMPLE NO: 90068821

SAMPLE TYPE: WASTE, HAZARDOUS/TOXIC/DISPOSAL

SITE IDENTIFIER: FANDXXXX

DATE RECEIVED: 901109

DATE COLLECTED: 901108

DATE REPORTED: 910204

SAMPLE SUBMITTED BY: 2nd Strategic Hosp./SGPB

RESULTS

Test

Results

Units

EPA Method

Comments:

PER MSGT. VAUGHN AND CONCURRENCE BY LT. MCLARIN (E8E) CHANGE TCLP METAL TO FULL TCLP.

SAMPLE IS (TOP 9%) 88% ETHYLENE GLYCOL, 6% 1,1,1-TRICHLOROETHANE, 4% WATER AND 2% DIOXANE. (BOTTOM 91%) 51% 1,1,1-TRICHLOROETHANE, 43% C12-C17 HYDROCARBONS AND 6% DIOXANE.

< - Signifies none detected and the detection limits.

Analyzed by: Datachem

Reviewed by: 

Michael J. Wantland, TSgt, USAF
NCOTC Occupational Chemistry Branch

AIR FORCE
OCCUPATIONAL AND ENVIRONMENTAL HEALTH LABORATORY
BROOKS AFB, TEXAS, 78235-5501

REPORT OF ANALYSIS

BASE SAMPLE NO: GT901357 DEHL SAMPLE NO: 90068822

SAMPLE TYPE: WASTE, HAZARDOUS/TOXIC/DISPOSAL

SITE IDENTIFIER: FABA104A DATE RECEIVED: 901109

DATE COLLECTED: 901107 DATE REPORTED: 910204

SAMPLE SUBMITTED BY: 2nd Strategic Hosp./SGPB

RESULTS

<u>Test</u>	<u>Results</u>	<u>Units</u>	<u>EPA Method</u>
Arsenic	<0.3	mg/L	3020/2060
Barium	<0.5	mg/L	3010/2080
Benzene	<8.0	mg/L	
Cadmium	9.2	mg/L	3010/2130
Carbon Tetrachloride	<7.5	mg/L	
Chlordane	<0.0003	mg/L	
Chlorobenzene	<6.5	mg/L	
Chloroform	<9.0	mg/L	
Chromium	0.99	mg/L	3010/2190
m-Cresol	<.0050	mg/L	
o-Cresol	<.0050	mg/L	
p-Cresol	<.0050	mg/L	
1,4-Dichlorobenzene	<0.0044	mg/L	
1,2-Dichloroethane	<12	mg/L	
1,1-Dichloroethene	<6.0	mg/L	
2,4-D	.0004	mg/L	
2,4-Dinitrotoluene	<.0057	mg/L	
Endrin	<0.00001	mg/L	
Heptachlor	<0.00001	mg/L	
Hexachlorobenzene	<0.0019	mg/L	
Hexachlorobutadiene	<0.0009	mg/L	
Hexachloroethane	<0.0016	mg/L	
Lead	<0.3	mg/L	3010/2420
Lindane	<0.00001	mg/L	
Mercury	<0.0005	mg/L	2420
Methoxychlor	<0.0006	mg/L	
Methyl Ethyl Ketone	<19	mg/L	
Nitrobenzene	<0.0019	mg/L	

TO:

AFOEHL/EQ
BROOKS AFB TX 78235-5501

PAGE 1 (Cont'd)

AIR FORCE
OCCUPATIONAL AND ENVIRONMENTAL HEALTH LABORATORY
BROOKS AFB, TEXAS, 78235-5501

REPORT OF ANALYSIS

BASE SAMPLE NO: GT901357

DEHL SAMPLE NO: 90068822

SAMPLE TYPE: WASTE, HAZARDOUS/TOXIC/DISPOSAL

SITE IDENTIFIER: FARA104A

DATE RECEIVED: 901109

DATE COLLECTED: 901107

DATE REPORTED: 910204

SAMPLE SUBMITTED BY: 2nd Strategic Hosp./SGPB

RFSUJ TS

<u>Test</u>	<u>Results</u>	<u>Units</u>	<u>EPA Method</u>
Pentachlorophenol	<.0036	mg/L	
Pyridine	<.0050	mg/L	
Selenium	<0.3	mg/L	3020/2740
Silver	<0.05	mg/L	3010/2760
Toxaphene	<0.001	mg/L	
Vinyl Chloride	<8.5	mg/L	
Trichloroethylene	<6.5	mg/L	
Tetrachloroethylene	<7.5	mg/L	
2,4,5-Trichlorophenol	<.0050	mg/L	
2,4,6-Trichlorophenol	<.0027	mg/L	
Silvex	<0.00005	mg/L	
Flash Point (closed cup)	>140	degrees F	1010
Corrosivity	SINC		1110
Hydrogen ion (pH)	9.2		1110
Cyanide (total)	<0.2		SW 846 SEC 8.3
Sulfides	10	mg/L	SW 846 SFC 8.3
Major components	SN		

SN : See comment.

SINC : Sample is not corrosive.

AIR FORCE
OCCUPATIONAL AND ENVIRONMENTAL HEALTH LABORATORY
BROOKS AFB, TEXAS, 78235-5501

REPORT OF ANALYSIS

BASE SAMPLE NO: GT901357 DEHL SAMPLE NO: 90068822

SAMPLE TYPE: WASTE, HAZARDOUS/TOXIC/DISPOSAL

SITE IDENTIFIER: FARA104A DATE RECEIVED: 901109

DATE COLLECTED: 901107 DATE REPORTED: 910204

SAMPLE SUBMITTED BY: 2nd Strategic Hosp./SGPR

RESULTS

<u>Test</u>	<u>Results</u>	<u>Units</u>	<u>EPA Method</u>
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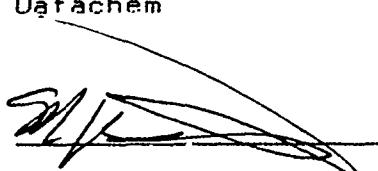
Comments:

PER MSGT. VAUGHN AND CONCURRENCE BY LT. MCLARIN (E8E) CHANGE TCLP METAL TO FULL TCLP.

SAMPLE IS (TOP 95%) 100% WATER. (BOTTOM 5%) 100% SOL ID, WHITE SOLIDS, LOOKS LIKE A ROCK.

< - Signifies none detected and the detection limits.

Analyzed by: Datachem

Reviewed by: 

Michael J. Wantland, T2gt, USAF
NOOC Occupational Chemistry Branch

AIR FORCE
OCCUPATIONAL AND ENVIRONMENTAL HEALTH LABORATORY
BROOKS AFB, TEXAS, 78235-5501

REPORT OF ANALYSIS

BASE SAMPLE NO: ST901358 OFHL SAMPLE NO: 90068838
SAMPLE TYPE: WASTE, HAZARDOUS/TOXIC/DISPOSAL
SITE IDENTIFIER: DATE RECEIVED: 901109
DATE COLLECTED: 901107 DATE REPORTED: 910103
 DATE REPRINTED: 910103
SAMPLE SUBMITTED BY: 2nd Strategic Hosp./RAPR

RESULTS

<u>Test</u>	<u>Results</u>	<u>Units</u>	<u>Mar Level</u>
Total organic halides	<1.0	mg/l	4000 ppb

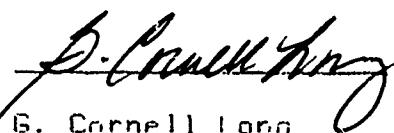
Comments:

< - Signifies none detected and the detection limits.

FROM 2FMS/MAFC, BATTERY SHOP Bldg 5743

Analyzed by: Biospherics, Inc.

Reviewed by:


G. Cornell Long
Chemist, Trace Organics

TO:

AFDEHL/ER
BROOKS AFB TX 78235-5501

PAGE 1

AIR FORCE
OCCUPATIONAL AND ENVIRONMENTAL HEALTH LABORATORY
BROOKS AFB, TEXAS, 78235-5501

REPORT OF ANALYSIS

BASE SAMPLE NO: GT901359

OEHL SAMPLE NO: 90068823

SAMPLE TYPE: WASTE, HAZARDOUS/TOXIC/DISPOSAL

SITE IDENTIFIER: DATE RECEIVED: 901109

DATE COLLECTED: 901108 DATE REPORTED: 910204

SAMPLE SUBMITTED BY: 2nd Strategic Hosp./SGPB

RESULTS

<u>Test</u>	<u>Results</u>	<u>Units</u>	<u>EPA Method</u>
1,1-Dichloroethene	<6.0	mg/L	
Lindane	NP	mg/L	
Toxaphene	NP	mg/L	
Arsenic	0.3	mg/L	3020/2060
Barium	2.6	mg/L	3010/2080
Benzene	<8.0	ug/L	
Cadmium	16.	mg/L	3010/2130
Carbon Tetrachloride	<7.5	mg/L	
Chlordane	NP	mg/L	
Chlorobenzene	<6.5	mg/L	
Chloroform	<9.0	mg/L	
Chromium	6.5	mg/L	3010/2190
m-Cresol	<.0050	mg/L	
o-Cresol	350.	mg/L	
p-Cresol	82.	mg/L	
1,4-Dichlorobenzene	<0.0044	mg/L	
1,2-Dichloroethane	<12	mg/L	
2,4-D	<0.0001	mg/L	
2,4-Dinitrotoluene	<.0057	mg/L	
Endrin	NP	mg/L	
Heptachlor	NP	mg/L	
Hexachlorobenzene	<0.0019	mg/L	
Hexachlorobutadiene	<0.0009	mg/L	
Hexachloroethane	<0.0016	mg/L	
Lead	66.	mg/L	3010/2420
Mercury	<0.0005	mg/L	2420
Methoxychlor	NP	mg/L	
Methyl Ethyl Ketone	<19	mg/L	

TO:

AFOEHL/EQ
BROOKS AFB TX 78235-5501

PAGE 1 (Cont'd)

AIR FORCE
OCCUPATIONAL AND ENVIRONMENTAL HEALTH LABORATORY
BROOKS AFB, TEXAS, 78235-5501

REPORT OF ANALYSIS

BASE SAMPLE NO: ST901359

OFHL SAMPLE NO: 90068823

SAMPLE TYPE: WASTE, HAZARDOUS/TOXIC/DISPOSAL

SITE IDENTIFIER:

DATE RECEIVED: 901109

DATE COLLECTED: 901108

DATE REPORTED: 910204

SAMPLE SUBMITTED BY: 2nd Strategic Hosp./SGPB

RESULTS

<u>Test</u>	<u>Results</u>	<u>Units</u>	<u>EPA Method</u>
Nitrobenzene	<0.0019	mg/L	
Pentachlorophenol	<.0036	mg/L	
Pyridine	<.0050	mg/L	
Selenium	<0.3	mg/L	3020/7740
Silver	0.35	mg/L	3010/7760
Vinyl Chloride	<8.5	mg/L	
Trichloroethylene	<6.5	mg/L	
Tetrachloroethylene	<7.5	mg/L	
2,4,5-Trichlorophenol	<.0050	mg/L	
2,4,6-Trichlorophenol	<.0027	mg/L	
Silvex	<0.00005	mg/L	
Flash Point (closed cup)	>140	degrees F	1010
Corrosivity	SINC		1110
Hydrogen ion (pH)	6.3		1110
Cyanide (total)	<0.2		SW 846 SEC 8.3
Sulfides	<10.0	mg/L	SW 846 SEC 8.3
Major components	SN		

NP : Test Not Performed

SN : See comment.

SINC : Sample is not corrosive.

AIR FORCE
OCCUPATIONAL AND ENVIRONMENTAL HEALTH LABORATORY
BROOKS AFB, TEXAS, 78235-5501

REPORT OF ANALYSIS

BASE SAMPLE NO: GT901359

DEHL SAMPLE NO: 90068823

SAMPLE TYPE: WASTE, HAZARDOUS/TOXIC/DISPOSAL

SITE IDENTIFIER:

DATE RECEIVED: 901109

DATE COLLECTED: 901108

DATE REPORTED: 910204

SAMPLE SUBMITTED BY: 2nd Strategic Hosp./SGPR

RESULTS

Test

Results

Units

EPA Method

Comments:

PER MSGT. VAUGHN AND CONCURRENCE BY LT. MCLARIN (EQE) CHANGE TCLP METAL TO FULL TCLP.

SAMPLE IS (TOP 78%) 81% WATER, 8% TRIETHANOL AMINE, 3% 2-METHYL 2,4-PENTANEDIOL, 2% 1-NOR-BUTOXY 2-PROPANOL, 1% MYRISTIC ACID, 1% OLEIC ACID AND 1% UNIDENTIFIED OXYGEN CONTAINING COMPOUND. (MIDDLE 13%) 84% WATER, 4% ISOPROPANOL ALCOHOL, 3% ACETONE, 3% METHYL ETHYL KETONE, 3% PROPYLENE GLYCOL MONOMETHYL ETHER ACETATE, 2% C4 ALCOHOLS AND 1% PROPYLENE GLYCOL MONOMETHYL ETHER. (BOTTOM 9%) 100% SLUDGE.
< - Signifies none detected and the detection limits.

Analyzed by: Datachem

Reviewed by: 

Michael J. Wantland, TSgt, USAF
NCOC Occupational Chemistry Branch

AIR FORCE
OCCUPATIONAL AND ENVIRONMENTAL HEALTH LABORATORY
BROOKS AFB, TX 78235-5501

REPORT OF ANALYSIS

BASE SAMPLE NO: GT901361

OFHL SAMPLE NO: 90068824

SAMPLE TYPE: WASTE, HAZARDOUS/TOXIC/DISPOSAL

SITE IDENTIFIER: DATE RECEIVED: 901109

DATE COLLECTED: 901108

DATE REPORTED: 910204

SAMPLE SUBMITTED BY: 2nd Strategic Hosp./SSPB

RESULTS

<u>Test</u>	<u>Results</u>	<u>Units</u>	<u>EPA Method</u>
1,2-Dichloroethane	<12	mg/L	
Arsenic	<0.3	mg/L	3020/2060
Barium	<0.5	mg/L	3010/2080
Benzene	<8.0	mg/L	
Cadmium	0.12	mg/L	3010/2130
Carbon Tetrachloride	<7.5	mg/L	
Chlordane	<0.0003	mg/L	
Chlorobenzene	<6.5	mg/L	
Chloroform	<9.0	mg/L	
Chromium	0.41	mg/L	3010/2190
m-Cresol	<.0050	mg/L	
o-Cresol	<.0050	mg/L	
p-Cresol	<.0050	mg/L	
1,4-Dichlorobenzene	<0.0044	mg/L	
1,1-Dichloroethene	<6.0	mg/L	
2,4-D	<0.0001	mg/L	
2,4-Dinitrotoluene	<.0052	mg/L	
Endrin	<0.00001	mg/L	
Heptachlor	<0.00001	mg/L	
Hexachlorobenzene	<0.0019	mg/L	
Hexachlorobutadiene	<0.0009	mg/L	
Hexachloroethane	<0.0016	mg/L	
Lead	<0.3	mg/L	3010/2420
Lindane	<0.00001	mg/L	
Mercury	<0.0005	mg/L	7470
Methoxychlor	<0.0006	mg/L	
Nitrobenzene	<0.0019	mg/L	
Pentachlorophenol	<.0036	mg/L	

TO:

AFOEHL/EQ
BROOKS AFB TX 78235-5501

PAGE 1 (Cont'd)

AIR FORCE
OCCUPATIONAL AND ENVIRONMENTAL HEALTH LABORATORY
BROOKS AFB, TEXAS, 78235-5501

REPORT OF ANALYSIS

BASE SAMPLE NO: GT901361 DFHL SAMPLE NO: 90068824

SAMPLE TYPE: WASTE, HAZARDOUS/TOXIC/DISPOSAL

SITE IDENTIFIER: DATE RECEIVED: 901109

DATE COLLECTED: 901108 DATE REPORTED: 910204

SAMPLE SUBMITTED BY: 2nd Strategic Hosp./SAPR

RESULTS

<u>Test</u>	<u>Results</u>	<u>Units</u>	<u>EPA Method</u>
Pyridine	<.0050	mg/L	
Selenium	<0.3	mg/L	3020/2240
Silver	<0.05	mg/L	3010/2260
Toxaphene	<0.001	mg/L	
Vinyl Chloride	<8.5	mg/L	
Trichloroethylene	<6.5	mg/L	
Tetrachloroethylene	<7.5	mg/L	
2,4,5-Trichlorophenol	<.0050	mg/L	
2,4,6-Trichlorophenol	<.0027	mg/L	
Silvex	<0.00005	mg/L	
Flash Point (closed cup)	<82.4	degrees F	1010
Corrosivity	SINC		1110
Hydrogen ion (pH)	7.3		1110
Cyanide (total)	<0.2		SW 846 SEC 8.3
Sulfides	<10.0	mg/L	SW 846 SEC 8.3
Methyl Ethyl Ketone	730.	mg/L	
Major components	SN		

SN : See comment.

SINC : Sample is not corrosive.

AIR FORCE
OCCUPATIONAL AND ENVIRONMENTAL HEALTH LABORATORY
BROOKS AFB, TEXAS, 78235-5501

REPORT OF ANALYSIS

BASE SAMPLE NO: GT901361

DEHL SAMPLE NO: 90068824

SAMPLE TYPE: WASTE, HAZARDOUS/TOXIC/DISPOSAL

SITE IDENTIFIER: DATE RECEIVED: 901109

DATE COLLECTED: 901108 DATE REPORTED: 910204

SAMPLE SUBMITTED BY: 2nd Strategic Hosp./SGPB

RESULTS

<u>Test</u>	<u>Results</u>	<u>Units</u>	<u>EPA Method</u>
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Comments:

PER MSGT. VAUGHN AND CONCURRENCE BY LT. MCLARTIN (E6E) CHANGE TCLP METAL TO FULL TCLP.

SAMPLE IS (TOP 95%) 86% CR-C14 HYDROCARBONS (ALKANES AND AROMATICS) AND 14% TOLUENE. (MIDDLE 3%) 93% WATER, 2% DIFETHYLENE GLYCOL MONOBUTYL ETHER, 1% METHANOL, 1% ACETONE, 1% ISOPROPANOL, 1% BUTANOL AND 1% UNIDENTIFIED OXYGEN CONTAINING COMPOUND. (BOTTOM 2%) 100% SLUDGE.

< - Signifies none detected and the detection limits.

Analyzed by: Ratachem

Reviewed by: 

Michael J. Wantland, E5gt., USAF
NOOTC Occupational Chemistry Branch

AIR FORCE
OCCUPATIONAL AND ENVIRONMENTAL HEALTH LABORATORY
BROOKS AFB, TEXAS, 78235-5501

REPORT OF ANALYSIS

BASE SAMPLE NO: GT901362

OEHL SAMPLE NO: 90069097

SAMPLE TYPE: WASTE, HAZARDOUS/TOXIC/DISPOSAL

SITE IDENTIFIER: XXXXXXXX

DATE RECEIVED: 901113

DATE COLLECTED: 901108

DATE REPORTED: 910206

SAMPLE SUBMITTED BY: 2nd Strategic Hosp., SGFS

RESULTS

<u>Test</u>	<u>Results</u>	<u>Units</u>	<u>EPA Method</u>
Aroclor 1016	<0.4	ug/L	EPA608
Aroclor 1221	<0.4	ug/L	EPA608
Aroclor 1232	<0.4	ug/L	EPA608
Aroclor 1242	<0.4	ug/L	EPA608
Aroclor 1248	<0.4	ug/L	EPA608
Aroclor 1254	<0.4	ug/L	EPA608
Aroclor 1260	<0.4	ug/L	EPA608

Analytical method used: EPA Method 608

Comments:

SGT ROBERT DAVIS/BARKSDALE AFB

< - Signifies none detected and the detection limits.

Analyzed by: Datachem

Reviewed by:

Michael J. Wantland, TSgt, USAF
NCOIC Occupational Chemistry Branch

TO:

AFOEHL/EQ
BROOKS AFB TX 78235-5501

AIR FORCE
OCCUPATIONAL AND ENVIRONMENTAL HEALTH LABORATORY
BROOKS AFB, TEXAS, 78235-5501

REPORT OF ANALYSIS

BASE SAMPLE NO: GT901363

DEHL SAMPLE NO: 90069095

SAMPLE TYPE: WASTE, HAZARDOUS/TOXIC/DISPOSAL

SITE IDENTIFIER: XXXXXXXX

DATE RECEIVED: 901113

DATE COLLECTED: 901108

DATE REPORTED: 910206

SAMPLE SUBMITTED BY: 2nd Strategic Hosp./SGFB

RESULTS

<u>Test</u>	<u>Results</u>	<u>Units</u>	<u>EPA Method</u>
Aroclor 1016	<0.4	ug/L	EPA608
Aroclor 1221	<0.4	ug/L	EPA608
Aroclor 1232	<0.4	ug/L	EPA608
Aroclor 1242	<0.4	ug/L	EPA608
Aroclor 1248	<0.4	ug/L	EPA608
Aroclor 1254	<0.4	ug/L	EPA608
Aroclor 1260	<0.4	ug/L	EPA608

Analytical method used: EPA Method 608

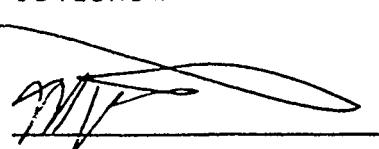
Comments:

SGT ROBERT DAVIS/BARKSDALE AFB

< - Signifies none detected and the detection limits.

Analyzed by: DatACHEM

Reviewed by:


Michael J. Wantland, TSgt, USAF
NCOIC Occupational Chemistry Branch

TO:

AFOEHL/EQ
BROOKS AFB TX 78235-5501

AIR FORCE
OCCUPATIONAL AND ENVIRONMENTAL HEALTH LABORATORY
BROOKS AFB, TEXAS, 78235-5501

REPORT OF ANALYSIS

BASE SAMPLE NO: GT901364 OEHL SAMPLE NO: 90069094

SAMPLE TYPE: WASTE, HAZARDOUS/TOXIC/DISPOSAL

SITE IDENTIFIER: XXXXXXXX DATE RECEIVED: 901113

DATE COLLECTED: 901108 DATE REPORTED: 910206

SAMPLE SUBMITTED BY: 2nd Strategic Hosp., SGPB

RESULTS

<u>Test</u>	<u>Results</u>	<u>Units</u>	<u>EPA Method</u>
Total organic halides	<0.1	ppb	60-70

Comments:

SGT. ROBERT DAVIS/BARKSCAPE AFB

< - Signifies none detected and the detection limits.

Analyzed by: Datachem

Reviewed by: 

Michael J. Wantland, TSgt, USAF
NCOIC Occupational Chemistry Branch

TO:

AFOEHL/EQ
BROOKS AFB TX 78235-5501

PAGE 1

AIR FORCE
OCCUPATIONAL AND ENVIRONMENTAL HEALTH LABORATORY
BROOKS AFB, TEXAS, 78235-5501

REPORT OF ANALYSIS

BASE SAMPLE NO: GT901364

OEHL SAMPLE NO: 90069089

SAMPLE TYPE: WASTE, HAZARDOUS/TOXIC/DISPOSAL

SITE IDENTIFIER: XXXXXXXX

DATE RECEIVED: 901113

DATE COLLECTED: 901108

DATE REPORTED: 910131

DATE REPRINTED: 910214

SAMPLE SUBMITTED BY: 2nd Strategic Hosp./SGPB

RESULTS.

<u>Test</u>	<u>Results</u>	<u>Units</u>	<u>EPA Method</u>
Flash Point (closed c.p)	>140	degrees F	1010
Corrosivity	SINC		1110
Hydrogen ion (pH)	8.0		1110
Cyanide (total)	<0.2		SW 846 SEC 8.3
Lead	<0.01	mg/L	3010/7420
Sulfides	<10.0	mg/L	SW 846 SEC 8.3
Arsenic	<0.3	mg/L	3020/7060
Cadmium	0.006	mg/L	3010/7130
Chromium	<0.01	mg/L	3010/7190
Major components	SN		

SN : See comment.

SINC : Sample is not corrosive.

Comments:

SGT. ROBERT DAVIS/BARKSDALE AFB
SAMPLE IS (TOP 6%) 50% C17->30 PARAFFIN HYDROCARBONS (HEAVY OIL), 47%
C11->C16 PARAFFIN HYDROCARBONS (LIGHT OIL) AND 3% WATER. (BOTTOM
94%) 100% WATER.

< - Signifies none detected and the detection limits.

TO:

AFOEHL/EQ
BROOKS AFB TX 78235-5501

PAGE 1(Cont'd)

AIR FORCE
OCCUPATIONAL AND ENVIRONMENTAL HEALTH LABORATORY
BROOKS AFB, TEXAS, 78235-5501

REPORT OF ANALYSIS

BASE SAMPLE NO: GT901364 DEHL SAMPLE NO: 90069099

SAMPLE TYPE: WASTE, HAZARDOUS/TOXIC/DISPOSAL

SITE IDENTIFIER: XXXXXXXX DATE RECEIVED: 901113

DATE COLLECTED: 901108 DATE REPORTED: 910206

SAMPLE SUBMITTED BY: 2nd Strategic Hosp./SGPB

RESULTS

<u>Test</u>	<u>Results</u>	<u>Units</u>	<u>EPA Method</u>
Aroclor 1016	<0.4	ug/L	EPA608
Aroclor 1221	<0.4	ug/L	EPA608
Aroclor 1232	<0.4	ug/L	EPA608
Aroclor 1242	<0.4	ug/L	EPA608
Aroclor 1248	<0.4	ug/L	EPA608
Aroclor 1254	<0.4	ug/L	EPA608
Aroclor 1260	<0.4	ug/L	EPA608

Analytical method used: EPA Method 608

Comments:

SGT ROBERT DAVIS/BARKSDALE AFB

* - Signifies none detected and the detection limits.

Analyzed by: Datachem

Reviewed by:

Michael J. Wantland, TSgt, USAF
NCOIC Occupational Chemistry Branch

TO:

AFOEHL/EQ
BROOKS AFB TX 78235-5501

AIR FORCE
OCCUPATIONAL AND ENVIRONMENTAL HEALTH LABORATORY
BROOKS AFB, TEXAS 78235-5501

REPORT OF ANALYSIS

BASE SAMPLE NO: GT901365 DEHL SAMPLE NO: 90069100

SAMPLE TYPE: WASTE, HAZARDOUS/TOXIC/DISPOSAL

SITE IDENTIFIER: XXXXXXXX DATE RECEIVED: 901113

DATE COLLECTED: 901108 DATE REPORTED: 91-206

SAMPLE SUBMITTED BY: 2nd Strategic Hosp./SSGPB

RESULTS

<u>Test</u>	<u>Results</u>	<u>Units</u>	<u>EPA Method</u>
Aroclor 1016	<0.4	ug/L	EPA608
Aroclor 1221	<0.4	ug/L	EPA608
Aroclor 1232	<0.4	ug/L	EPA608
Aroclor 1242	<0.4	ug/L	EPA608
Aroclor 1248	<0.4	ug/L	EPA608
Aroclor 1254	<0.4	ug/L	EPA608
Aroclor 1260	<0.4	ug/L	EPA608

Analytical method used: EPA Method 608

Comments:

SGT ROBERT DAVIS/BARKSDALE AFB

< - Signifies none detected and the detection limits.

Analyzed by: Datachem

Reviewed by:

Michael J. Wantland, TSgt, USAF
NCOIC Occupational Chemistry Branch

TO:

AFOEHL/EO
BROOKS AFB TX 78235-5501

PAGE 1

AIR FORCE
OCCUPATIONAL AND ENVIRONMENTAL HEALTH LABORATORY
BROOKS AFB, TEXAS, 78235-5501

REPORT OF ANALYSIS

BASE SAMPLE NO: GTP01365 DEHL SAMPLE NO: 20069101

SAMPLE TYPE: WASTE, HAZARDOUS/TOXIC/DISPOSAL

SITE IDENTIFIER: XXXXXXXX DATE RECEIVED: 901113

DATE COLLECTED: 901108 DATE REPORTED: 910206

SAMPLE SUBMITTED BY: 2nd Strategic Hosp./SGPS

RESULTS

Test	Results	Units	EPA Method
Aroclor 1016	<0.4	ug/L	EPA608
Aroclor 1221	<0.4	ug/L	EPA608
Aroclor 1232	<0.4	ug/L	EPA608
Aroclor 1242	<0.4	ug/L	EPA608
Aroclor 1248	<0.4	ug/L	EPA608
Aroclor 1254	<0.4	ug/L	EPA608
Aroclor 1260	<0.4	ug/L	EPA608

Analytical method used: EPA Method 608

Comments:

SGT ROBERT DAVIS/BARKSDALE AFB

< - Signifies none detected and the detection limits.

Analyzed by: DatACHEM

Reviewed by: 

Michael J. Wantland, TSGT, USAF
NCOIC Occupational Chemistry Branch

TO:

AFOEHL/EO
BROOKS AFB TX 78235-5501

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HQ AFSC/SGPB Andrews AFB DC 20334-5000	1
HQ USAF/SGPA Bolling AFB DC 20332-6188	1
HQ SAC/DEEV Offutt AFB NE 68113-5001	5
HQ SAC/SGPB Offutt AFB NE 68113-5001	1
AAMRL/TH Wright-Patterson AFB OH 45433-6573	1
7100 CSW Med Cen/SGPB APO New York 09220-5300	1
Det 3 AL APO San Francisco 96239-5000	1
USAFSAM/TSK Brooks AFB TX 78235-5301	1
USAFSAM/BE Brooks AFB TX 78235-5301	2
Defense Technical Information Center (DTIC) Cameron Station Alexandria VA 22304-6145	2
HQ USAF/LEEV Bolling AFB DC 20330-5000	1
HQ AFESC/RDV Tyndall AFB FL 32403-6001	1
2 Strategic Hospital/SGPB Barksdale LA 71110-5300	5
2 CSG/DEV Barksdale LA 71110-5000	5
HSD/XA Brooks AFB TX 78235-5000	1